

CHIRURGIA DELLA CATARATTA NEGLI OCCHI SOTTOPOSTI A CHERATOPLASTICA

Niccolò Salgari



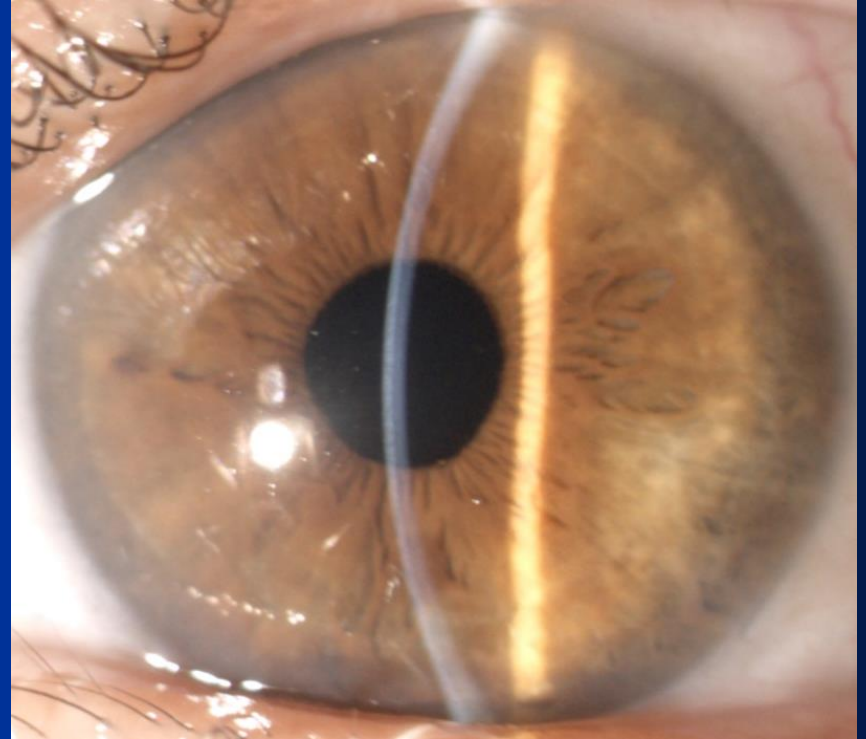
Università
degli Studi
di Ferrara



CASO: 58 anni ♀

OD: Fuchs + Cataratta

- ✓ Cornea trasparente
- ✓ AV = 5/10



CASO: 58 anni ♀

OD: Fuchs + Cataratta

✓ Solo FACO

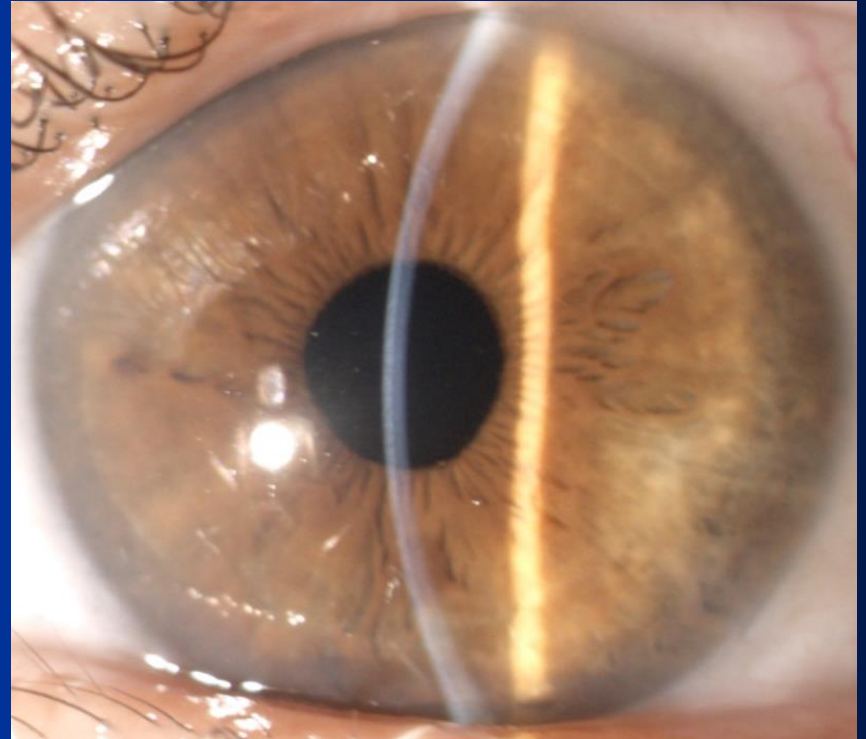
VS

Faco + DMEK

✓ Standard

VS

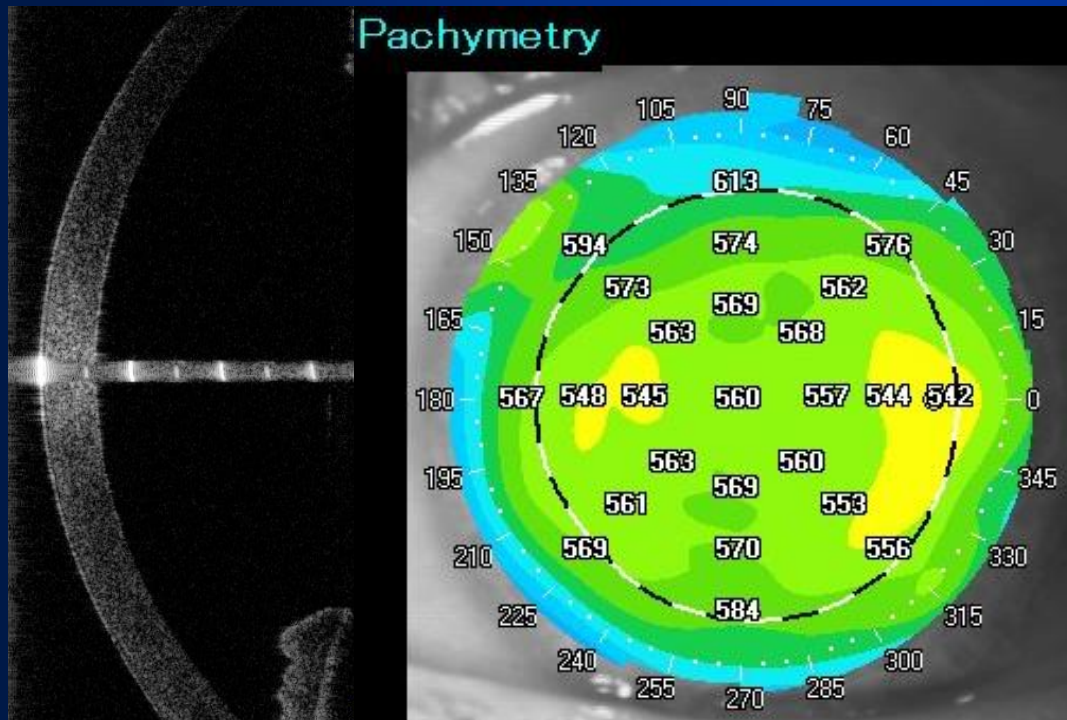
Premium IOL



**Possiamo predire il
rischio di scompenso
post-cataratta in
Fuchs???**

CATARATTA IN DISTROFIA DI FUCHS

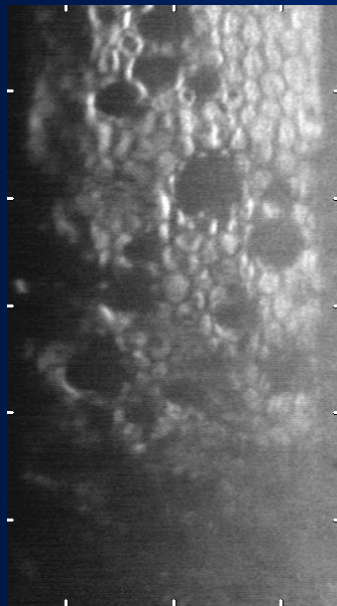
1. OCT del segmento anteriore



Pachimetria
< 600 µm
Basso rischio di
scompenso

CATARATTA IN DISTROFIA DI FUCHS

2. Densità cellulare endoteliale (ECD) centrale e periferica



pECD > 1800 cells/mm² =

**BASSO RISCHIO di
scompenso corneale**

CASO: 65 anni ♀

OD: Fuchs + Cataratta

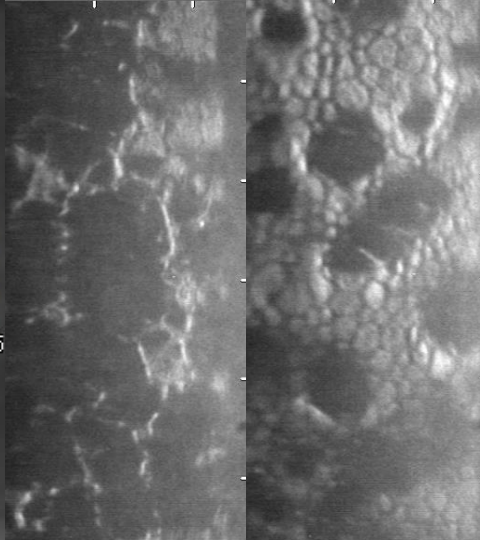
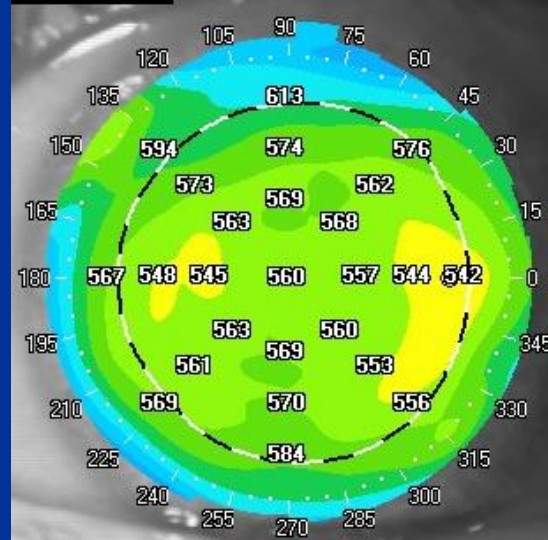
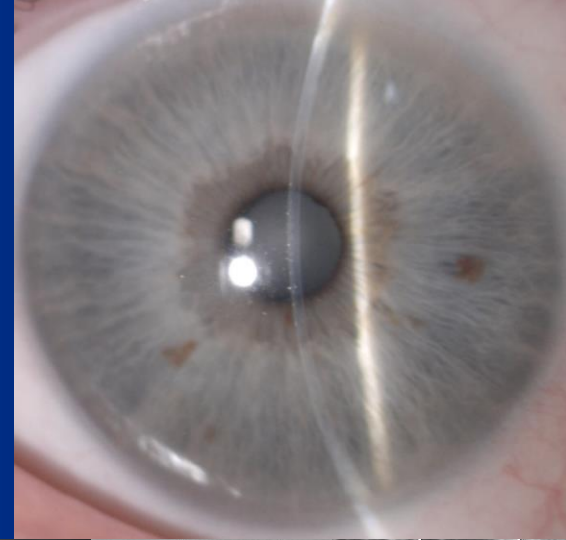
1. Cornea trasparente

2. AV = 5/10

3. CCT = 571 μm

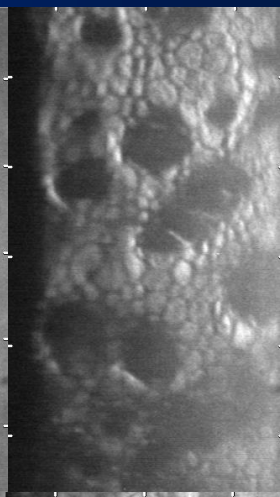
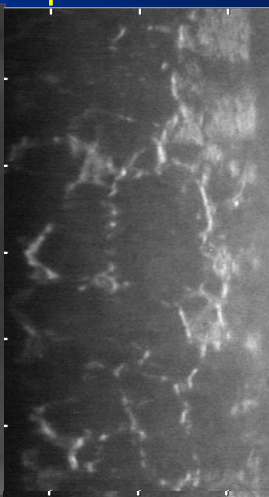
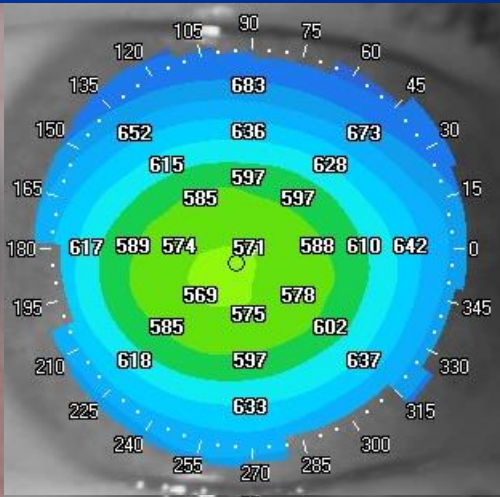
4. pECD = 1863

Piano: Solo Faco!

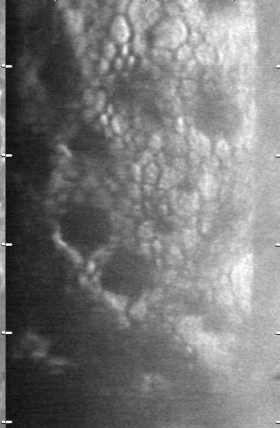
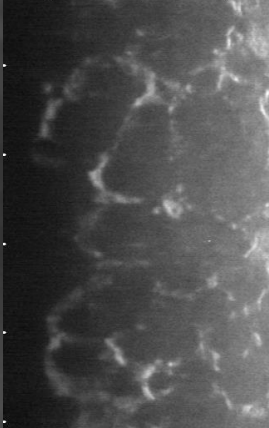
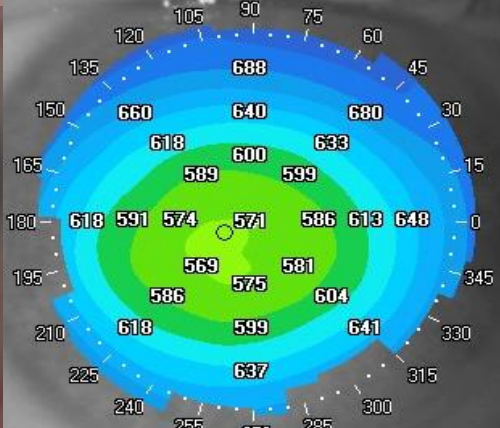


CASO: 65 anni ♀

PRE
OP



POST
OP



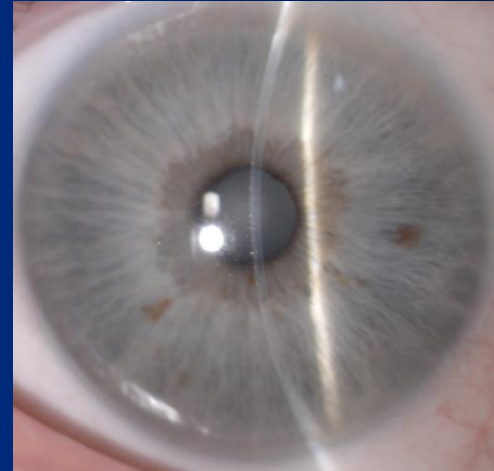
Facoemulsificazione in FUCHS

Serie di 43 interventi con:

- Follow-up per più di 5 anni
- CCT medio = 588 ± 29 μm

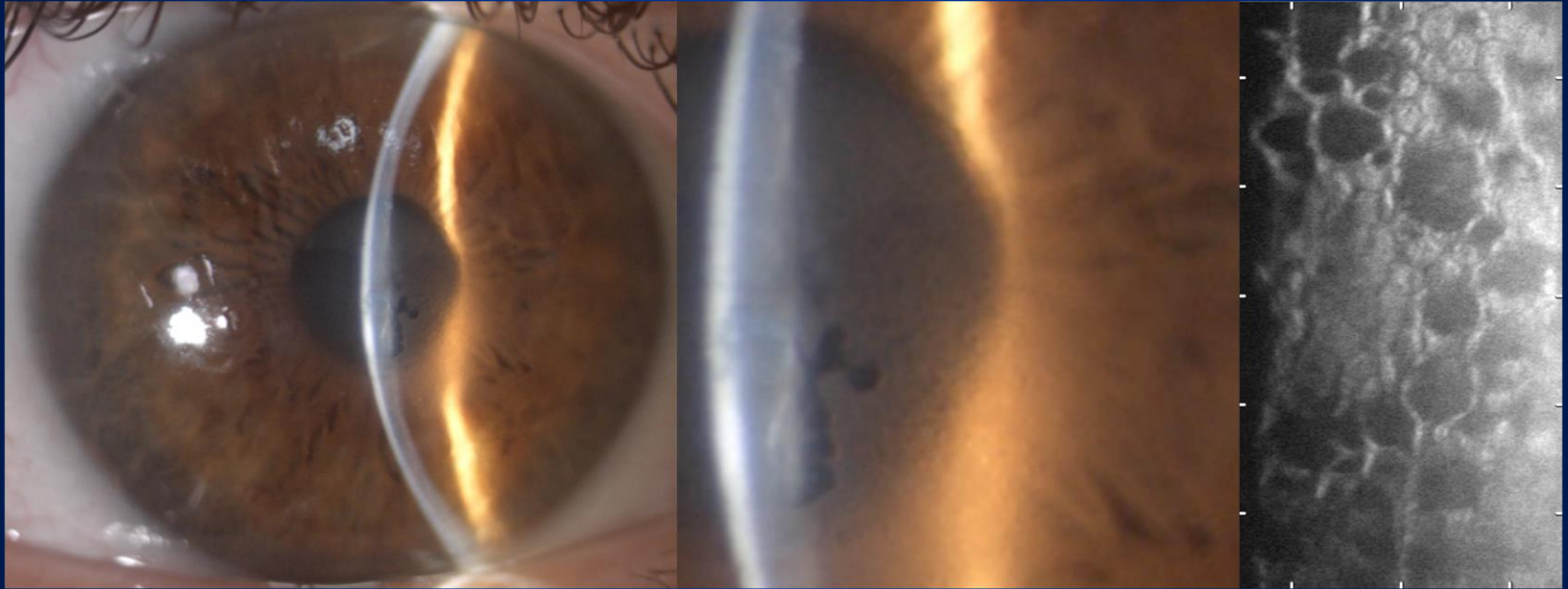
Risultati: ECL medio = 5.7 %

- Nessun trapianto endoteliale ad 8 anni dalla facoemulsificazione



CASO: 52 anni ♀

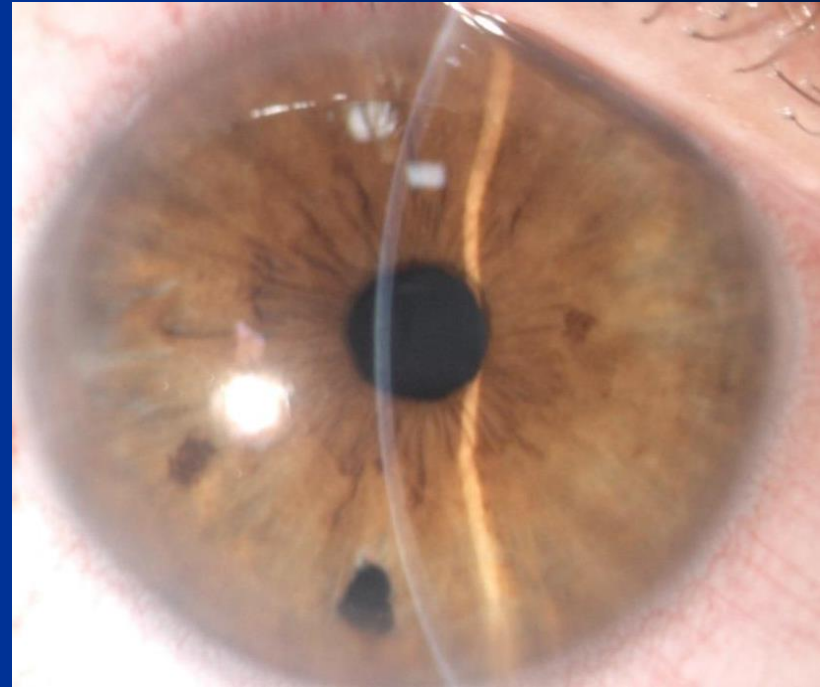
OD: Fuchs ad esordio precoce



Piano chirurgico: ???

Trapianto di endotelio in occhio fachico

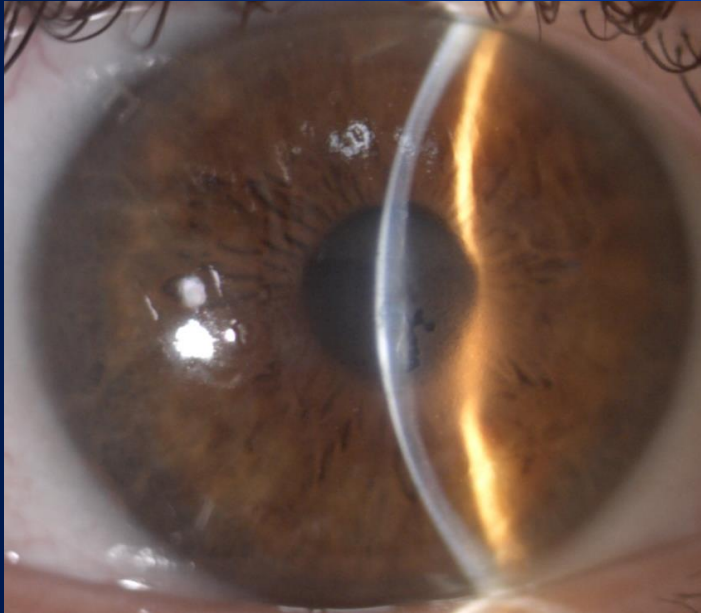
- ✓ ↑ rischio di chisura
angolare
- ✓ Necessità di steroidi a
lungo termine
- ✓ Sviluppo di cataratta
fino al 40% dei casi



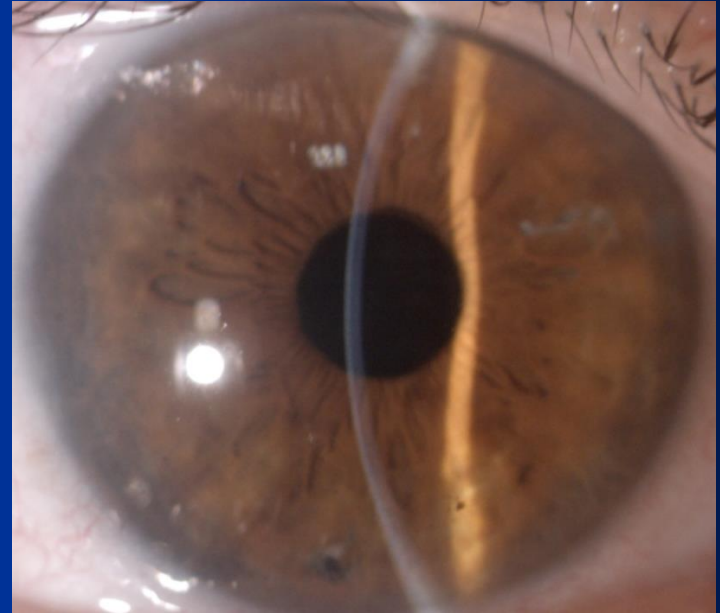
La procedura combinata di cataratta + trapianto di endotelio è la scelta raccomandata per **tutti i pazienti > 50 anni** con scompenso corneale a prescindere dallo stato della lente

CASO: 52 anni ♀

OD: Fuchs ad esordio precoce



PreOp



Post Faco + DMEK

(Acuità visiva corretta = 10/10)

Trapianto di endotelio in occhio fachico < 50 anni

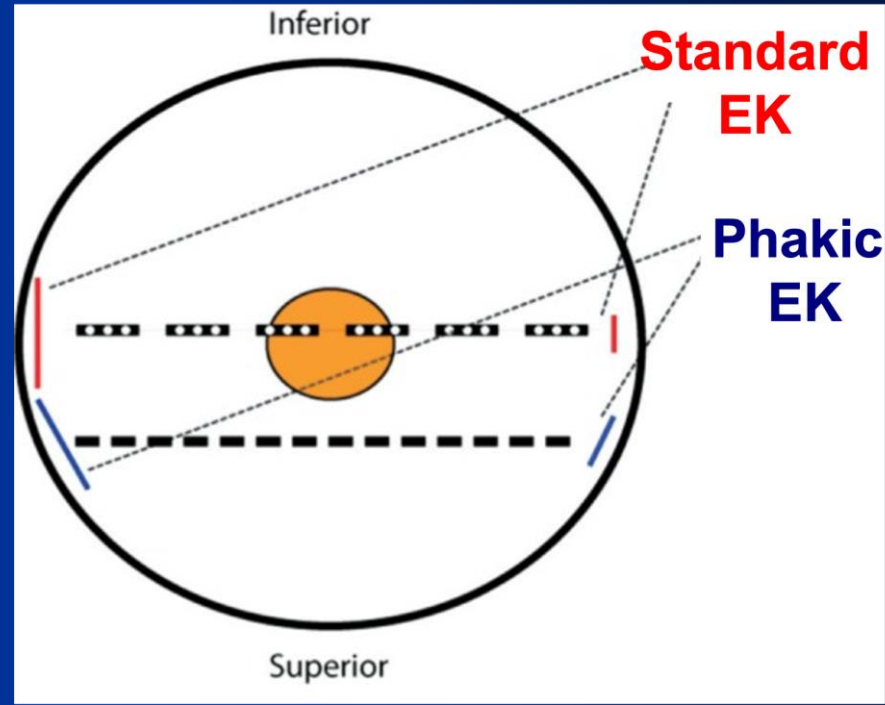
> Int J Ophthalmol. 2018 Jan 18;11(1):53-57. doi: 10.18240/ijo.2018.01.10. eCollection 2018.

Descemet stripping automated endothelial keratoplasty in phakic eyes: incision modification reducing cataract formation

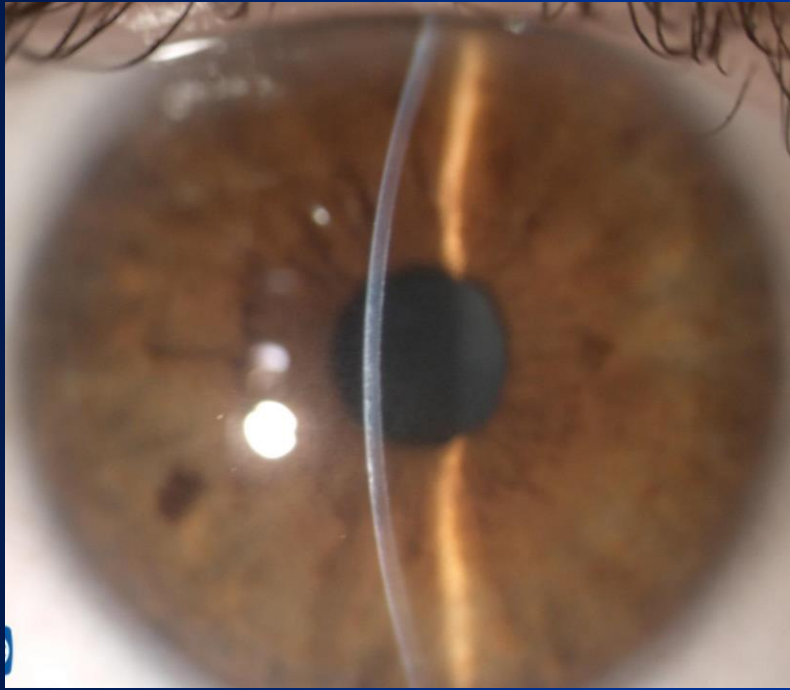
Jacqueline Beltz ^{1 2 3}, Silvana Madi ^{1 2 4}, Yoav Nahum ^{1 2 5 6}, Paolo Santorum ^{1 2 7},
Massimo Busin ^{1 2 8}

Trapianto di endotelio in occhio fachico

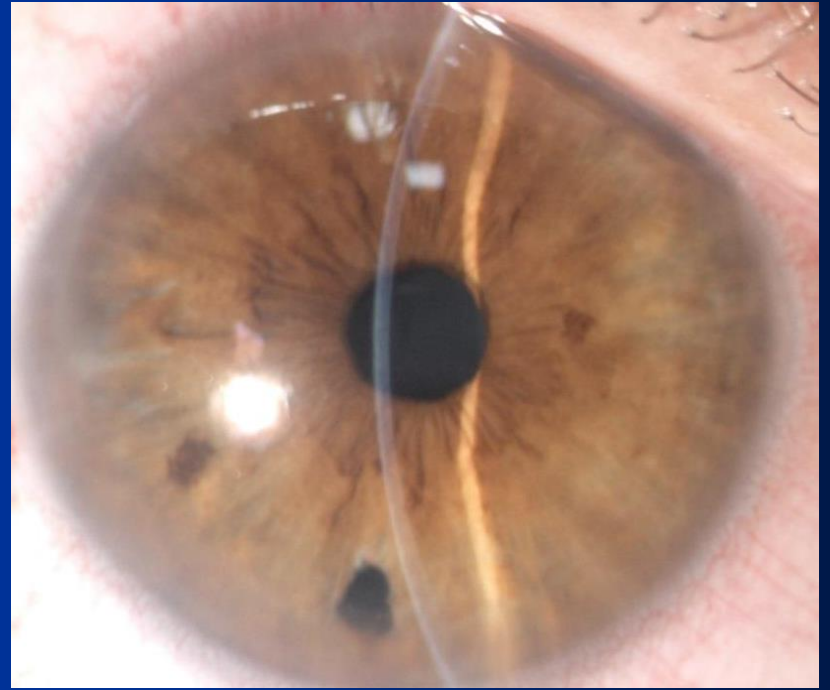
- ✓ Spostare le incisioni **superiormente**
- ✓ Tecnica Pull-Through
- ✓ Iridectomia periferica di routine



CASO: 42 anni ♀



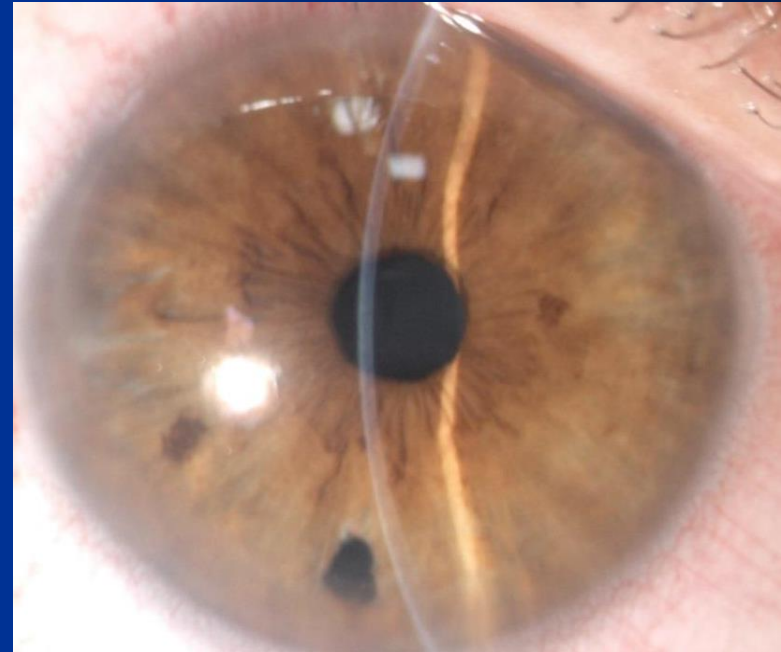
Preop
Fuchs con lente trasparente



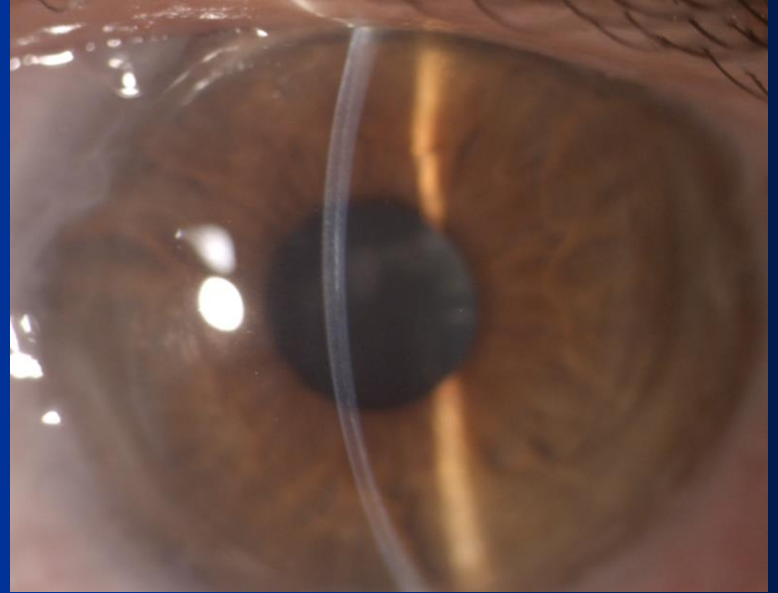
Post DMEK
AV corretta = 10/10

Intervento per cataratta DOPO trapianto di endotelio

- ✓ Tunnel sclero-corneale
- ✓ Protezione con viscoelastico
- ✓ Facoemulsificazione nel sacco capsulare

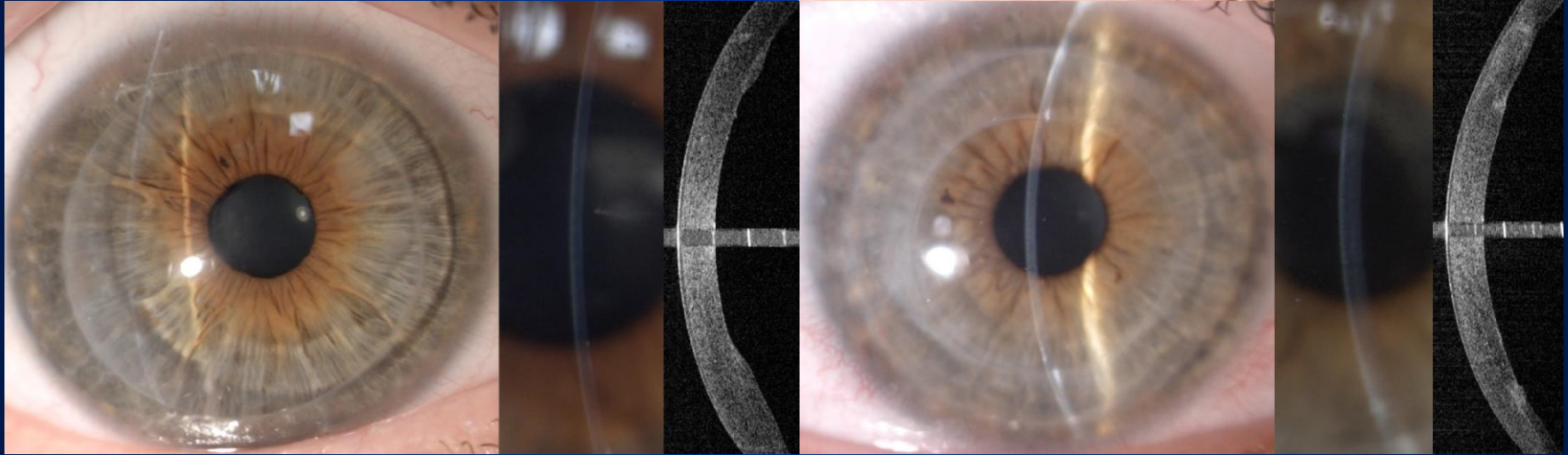


**CATARATTA
POST
TRAPIANTO
PERFORANTE
E LAMELLARE**



La cornea è la
principale fonte di
errori nel calcolo della
lente intraculare

ASTIGMATISMO POST-CHERATOPLASTICA > 4.5D



8% delle DALK

11% delle PK a fungo

Myerscough J et al.

<https://doi.org/10.1016/j.ajo.2020.07.009>

CASO: 60 anni ♂

OD: vecchia PK con cataratta

- ✓ Cornea trasparente
- ✓ AV = 3/10
- ✓ ECD > 600 cells



Diagnosi iniziale?

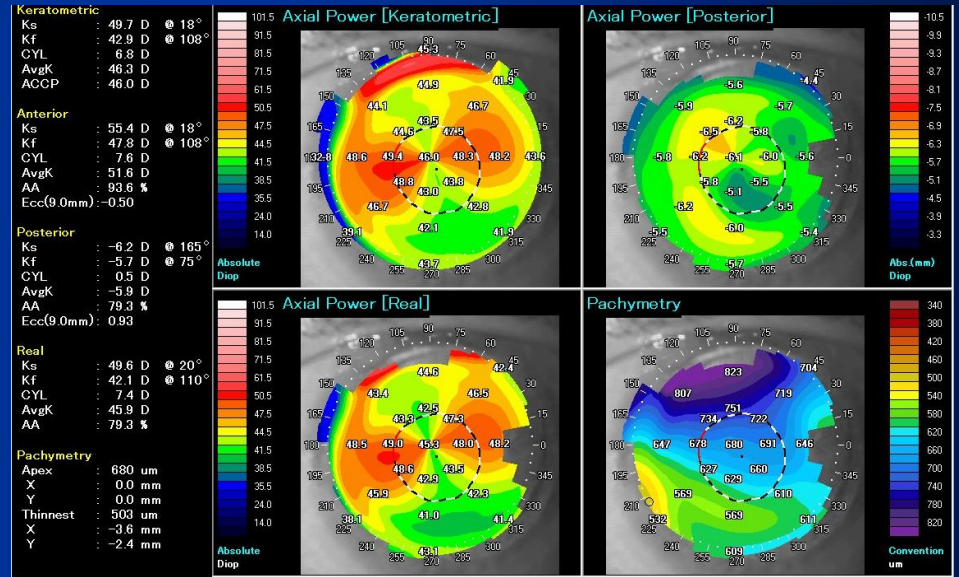
PK per cheratocono

VS

**PK per cheratopatia
bollosa**

CASO: 60 anni ♂

OD: vecchia PK con cataratta

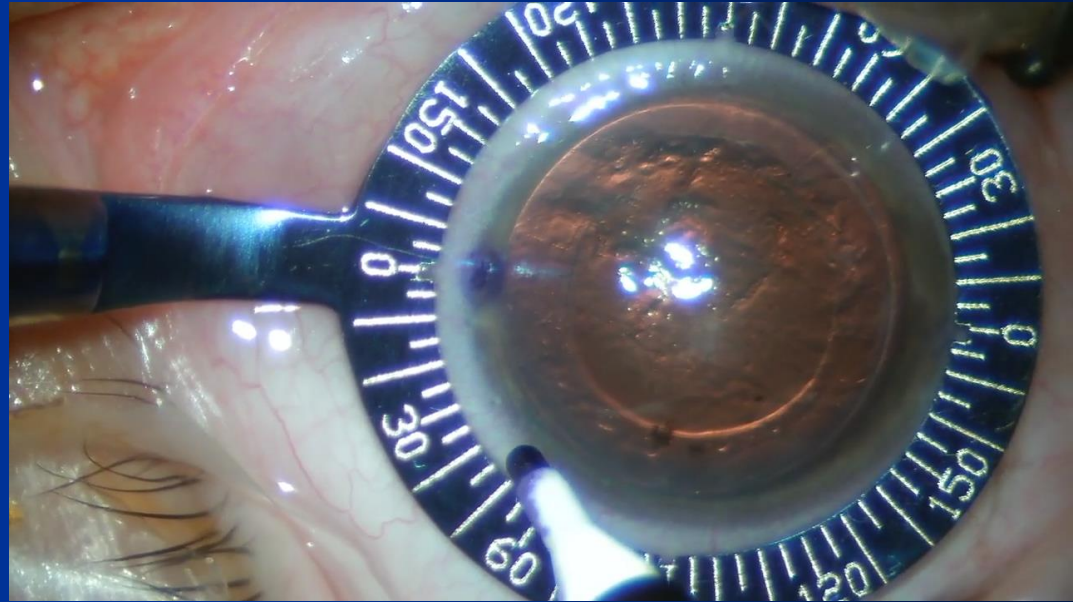


Lembo trasparente
No segni di ectasia

Astigmatismo regolare
(K=46.3D, RA =6.8D)

LENTE TORICA POST-PK

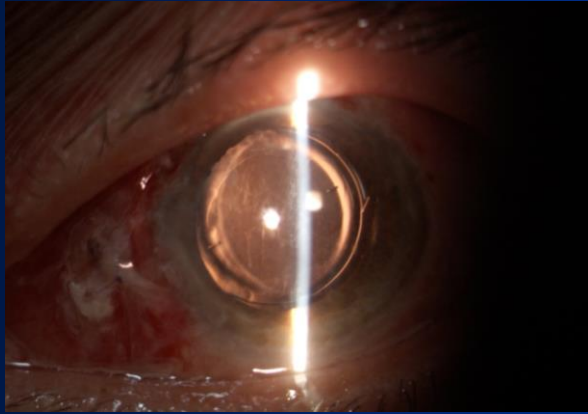
- ✓ Marcatura
- ✓ Tunnel sclero-corneale
- ✓ Faco nel sacco capsulare
- ✓ Rimozione OVD



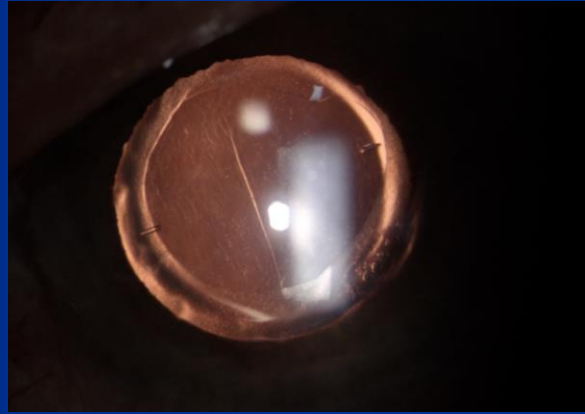


CASO: 60 anni ♂

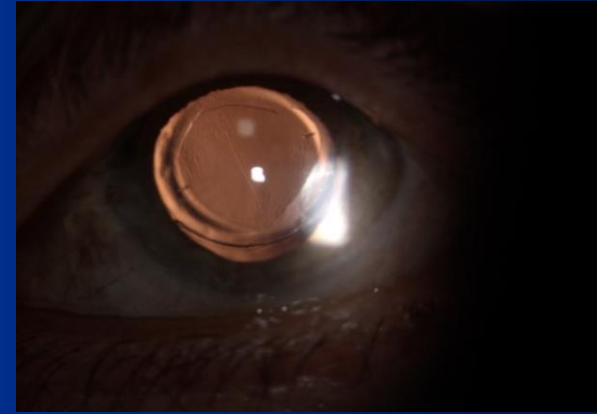
OS: post-PK per cheratocono



Giorno 1 AV:0.8

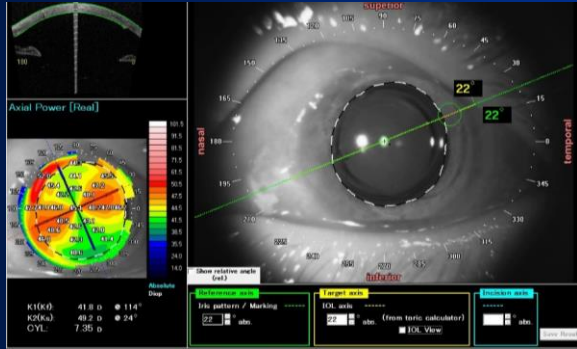


1 Mese VA: 1.2

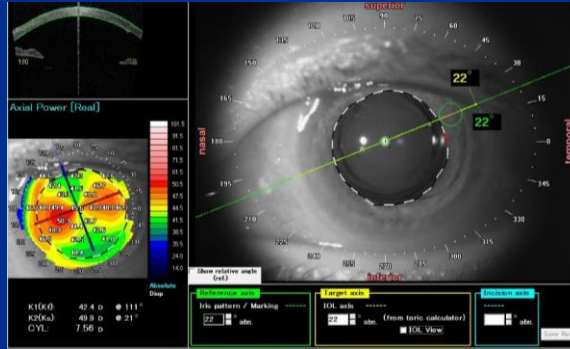


3 Mesi VA: 1.2

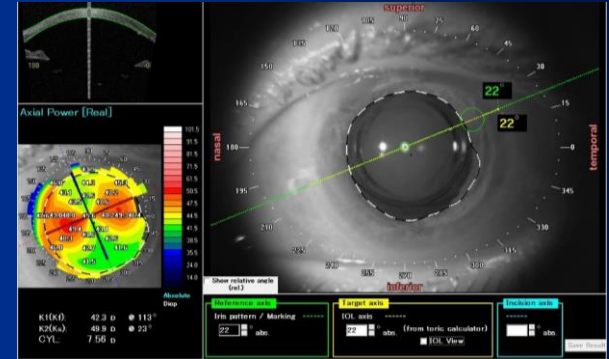
CASO 6: 60 anni



Giorno 1



Mese 1



Mese 3

	Pre-Op	Giorno 1	Mese 1	Mese 3
K1	42.10 x 110°	41.80 x 114°	42.20 x 110°	42.40 x 111°
K2	49.60 x 20°	49.20 x 24°	49.90 x 21°	49.90 21°
Astigmatismo topografico	7.50 D	7.35 D	7.56 D	7.56 D
Astigmatismo soggettivo	-6.00 x 80°	-3.00 x 120°	-1.00 x 70°	-1.00 x 70°
Visus senza correzione	0.4	0.4	1.0	1.0
Visus con correzione	0.4	0.8	1.2	1.2

Chirurgia della cataratta dopo PK

Vantaggi di una procedura sequenziale

- ✓ ↑ Accuratezza lunghezza assiale
- ✓ ↑ Accuratezza cheratometrie
- ✓ ↑ Utilizzo di lenti toriche
- ✓ **Migliori risultati refrattivi!!**



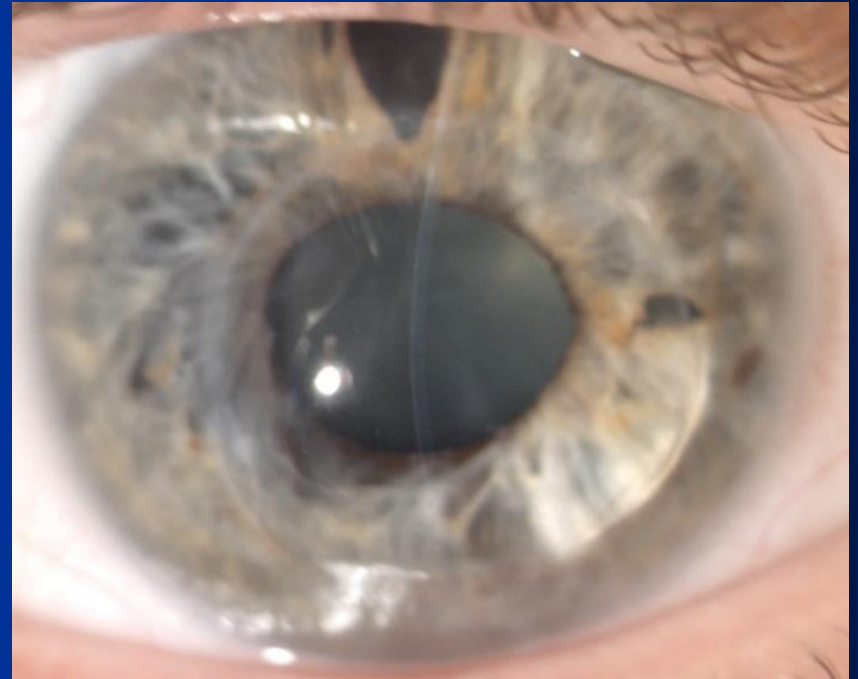
CASO: 65 anni ♂

OD: vecchia PK con cataratta

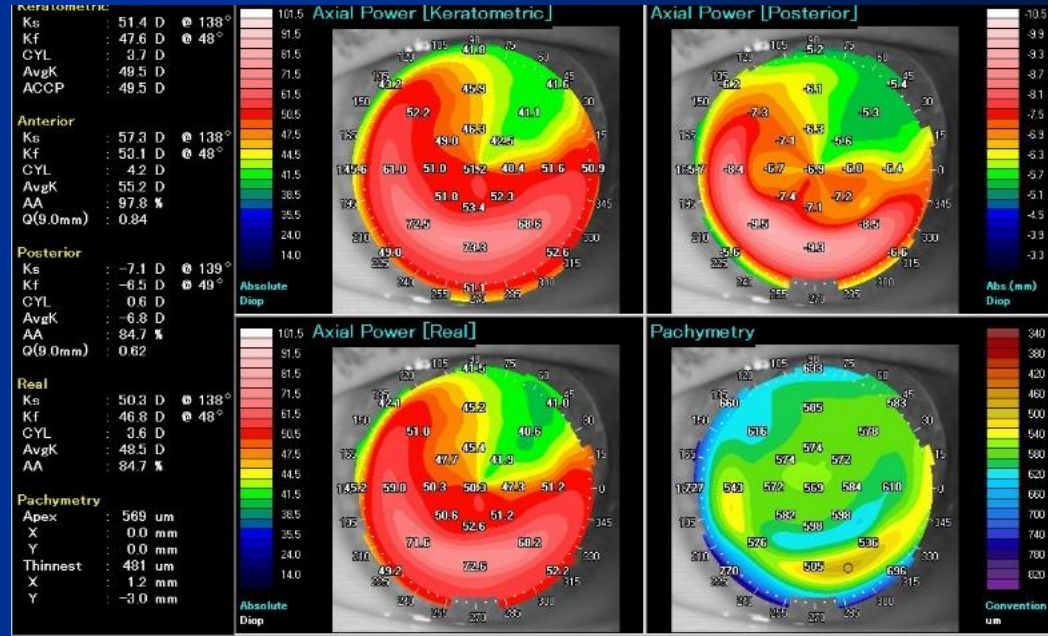
**Intervento per
cataratta**

vs

**Cheratoplastica
lamellare 9.0mm**



CASO: 65 anni



6 mm lembo di PK
trasparente a 34 anni

Astigmatismo irregolare
elevato ($K > 50D$)

STROMAL PEELING



Stromal Peeling for DALK in Post-PK Eyes



UNIVERSITÀ
DEGLI STUDI
DI FERRARA
- EX LABORE FRUCTUS -



Ospedali
Privati Forlì



STROMAL PEELING (DALK in PK)

2021

Multicenter Study > Am J Ophthalmol. 2021 Nov;231:144-153. doi: 10.1016/j.ajo.2021.06.005.

Epub 2021 Jun 10.

Ultrastructural Alterations of Grafted Corneal Buttons: The Anatomic Basis for Stromal Peeling Along a Natural Plane of Separation

Massimo Busin ¹, Cristina Bovone ², Vincenzo Scorgia ³, Erika Rimondi ⁴, Yoav Nahum ⁵, James Myerscough ⁶, Angeli Christy Yu ²

2022

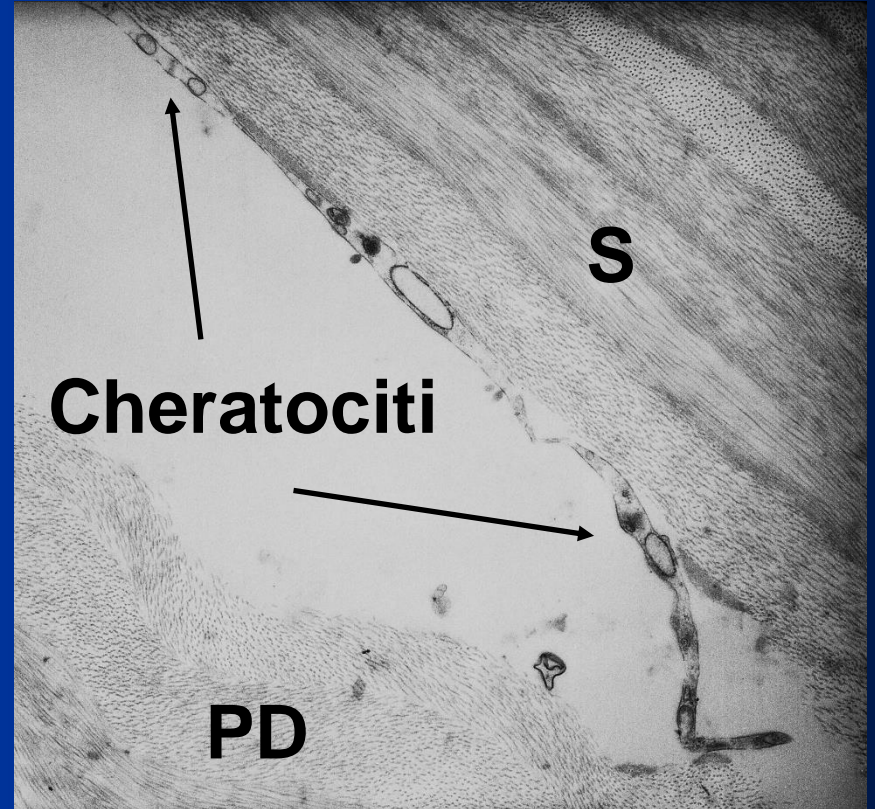
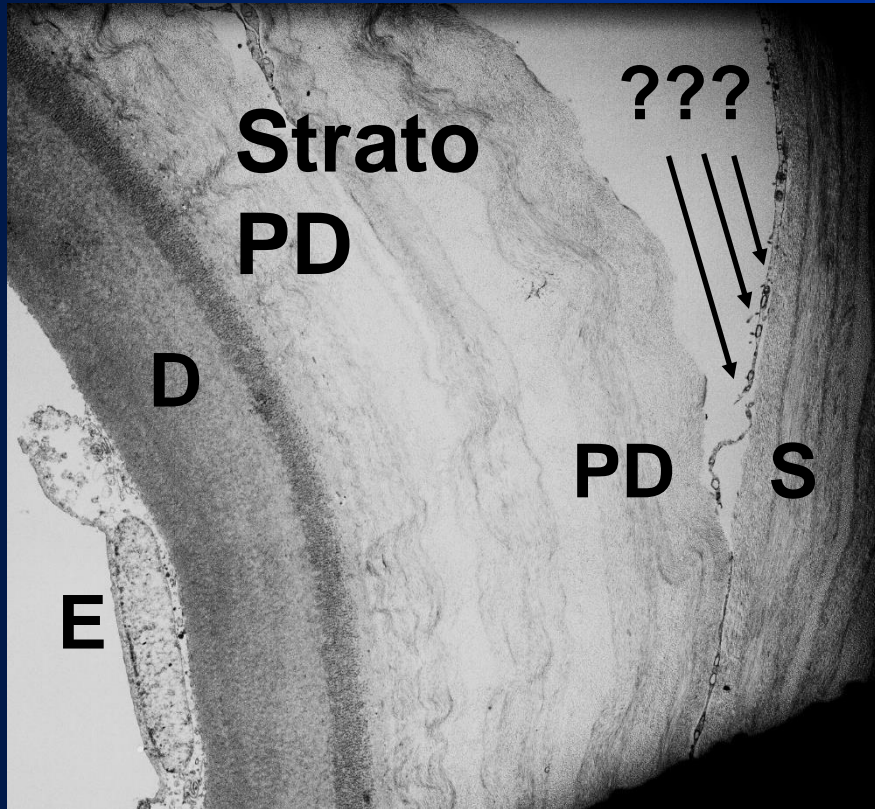
> Br J Ophthalmol. 2022 Mar;106(3):336-340. doi: 10.1136/bjophthalmol-2020-316653.

Epub 2020 Nov 26.

Stromal peeling for deep anterior lamellar keratoplasty in post-penetrating keratoplasty eyes

Cristina Bovone ^{1 2 3}, Yoav Nahum ^{4 5}, Vincenzo Scorgia ⁶, Giuseppe Giannaccare ⁶, Rossella Spina ^{1 2 3}, James Myerscough ^{2 3 7}, Angeli Christy Yu ^{1 2 3}, Massimo Busin ^{8 2 3}

STROMAL PEELING (DALAK in PK)



9.0 mm DALK in PK

LK = 125/142 (88%)

MK = 17/142 (12%)

91% \geq AV 5/10





Grazie per l'attenzione!

Niccolò Salgari



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