LASICAT
“Lasers in Cataract Surgery”
First experience with the LaserSoft

Volker Rasch, MD
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“Lasers in Cataract Surgery”

LASERTREATMENT
Cornea
(Lasik, PRK)
+
CATARACT

(Bi-Optics)

LASERTECHNIQUES
in CATARACT-SURGERY
Cornea
- Flap-Cut
- Corneal Incision

Lens
- Rhexis
- Phacoysis
Today’s surgical possibilities

Excimer

Lasik

PRK

Solid State

New

Intervention

• PIOL
• IOL, monofocal-multifocal-toric IOL
• LASIK, PRK, LASEK

1. Procedure plan

1. FLAP
2. CAT
3. LASER
2. Procedure plan

IOL Selection in Cataract Surgery
Foldable IOLs

- Monofocal IOL
- Multifocal IOL
- Toric IOL

Followed by PRK or LASIK

3. Procedure plan

Patients with superficial corneal dystrophies

- Monofocal IOL

Followed by PRK

Disclosure: * LaserSoft, Katana Technologies: not FDA approved, CE marked
Results 4: LASIK or PRK after Cataract Surgery

a. In 35 eyes with monofocal IOLs we did a planned LASIK (LaserSoft), ast > 1 dpt, max astigmatism 4,5 dpt.
   Result: ast < 0,75 dpt increased vision

b. In 20 eyes with multifocal IOLs we did a LASIK (LaserSoft),
   astigmatism > 1 dpt, max 4,5 dpt
   Result: better far and near vision

c. In 7 eyes with toric IOLs we did a planned LASIK (Solid State Laser, LaserSoft*, Katana Technologies, Germany)
   Result: better vision, different results

d. In 5 eyes with superficial corneal distrophies we did a PRK (Solid State Laser, LaserSoft*, Katana Technologies, Germany).
   Result: clear cornea, better vision and refraction in all cases

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Problem: Anisometropia, Astigmatism after Cataract Surgery
- PRK -

Pre-OP:
BCVA: +2.0 = -2.0 cyl A 96° 0.7

Post-OP:
UCVA 0.8
BCVA -0.25 = -0.5 cyl A 4° 1.0
Problem: Anisometropia, Myopia, Astigmatism after Cataract Surgery
- PRK -

Pre-OP:
BCVA -4.0 = -1.5 cyl A 20° 1.0

Post-OP:
UCVA 1.2

Problem: Myopia, Astigmatism – right eye
- LASIK -

Pre-OP:
BCVA -6.75 = -0.5 cyl A 68° 1.0

Post-OP:
BCVA +0.5 = -0.5 cyl A 15° 0.9

Problem: Flapstriae
**Problem:** Myopia, Astigmatism – left eye  
- LASIK -

**Pre-OP:**  
BCVA $-6.5 = -0.5$ cyl A $110^\circ$ 1.0

**Post-OP:**  
UCVA 1.0  
BCVA $+0.5 = -0.5$ cyl A $70^\circ$ 1.0

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**Problem:** Astigmatism, Corneal Scares, Decentrated Pupil after Corneal Perforation 10 years ago, Cataract Surgery 3 months ago, Iris Plastic 1 month ago  
- PRK -

**Pre OP:**  
BCVA $+1.75 = -4.5$ cyl A $160^\circ$ 0.9

**Post OP:**  
UCVA 0.9  
BCVA $+0.75 = -0.25$ cyl A $170^\circ$ 1.2
Conclusion

Additional benefit for patients vision can be added if the cataract surgery is planned with Laser treatment after the cataract surgery.

LASIK and PRK offer today excellent possibilities to safely improve vision especially in patients with multifocal and toric IOLs.

Current experiences show that both, Excimer as well as Solid State Lasers like LaserSoft, lead to similar good results. Statistics are not yet possible (more cases necessary).