

CORRECTION OF ASTIGMATISM WITH TORIC IOL

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GLASSES
CONTACT LENSES
LRI
OCCI
LASIK
TORIC IOL

PURPOSE.

- TO EVALUATE STABILITY OF TORIC IOL MODEL TSN 60 T3-T4-T5 (ALCON) AFTER CATARACT SURGERY WITH ENDOCAPSULAR IOL IMPLANTATION



TO CORRECT
PREOPERATIVE
CORNEAL
ASTIGMATISM
WITH VERY GOOD
VISUAL
OUTCOMES

PREOPERATIVE PATIENT
EXAMINATION/PREPARATION
INTRAOPERATIVE MANIPULATIONS
POSTOPERATIVE EVALUATION

PREOPERATIVE PATIENT EXAMINATION/PREPARATION

INTRAOPERATIVE MANIPULATIONS

POSTOPERATIVE EVALUATION

REFRACTOMETRY
KERATOMETRY
(STEEP & FLAT MERIDIAN)
SPHERICAL IOL POWER
TORIC IOL CALCULATIONS
MARKING 3,6,9,12 O'CLOCK POSIONS

Alcon TORIC

Please correct the errors noted in below and press continue.
Steep Axis and Flat Axis must differ by 90° ± 5°

Surgeon Name	Jasvika
Patient Name	Gita Arun
Additional Patient Information (I.D., Case, etc.)	
Eye Selection	OD (Right) OS (Left)
K Notation	Dioptr Millimeter
Flat K	44.88 35.000
@ Flat Axis	0° - 180°
Steep K	49.63 35.000
@ Steep Axis	0° - 180°
IOL Spherical Power (P-IOL)	17.5 D 6.0 D - 30.0 D
Surgically Induced Astigmatism (SIA)	0.25 0.000
Incision Location (IL)	180 0° - 360°

Steep Axis
Flat Axis
Incision

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Alcon TORIC

Please review the pre-op information and press continue.

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Steep Axis
Flat Axis
Incision

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Alcon TORIC

Alcon does not receive or retain any patient data. Please print a copy of the final output for your records. Contact your Alcon representative for assistance with Alcon's Toric IOL system.

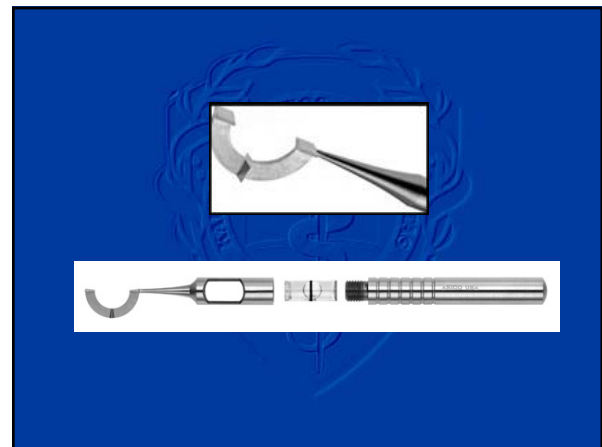
Lens Recommendation

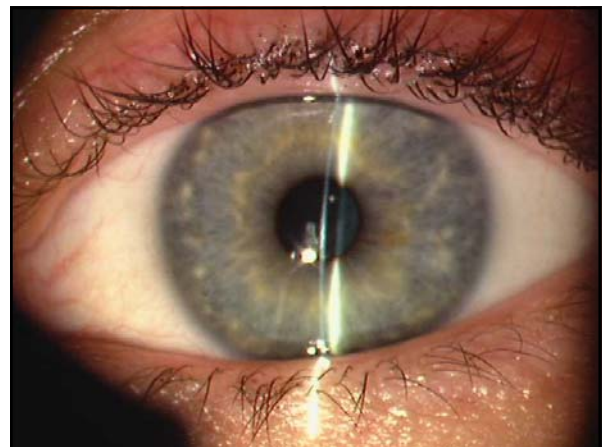
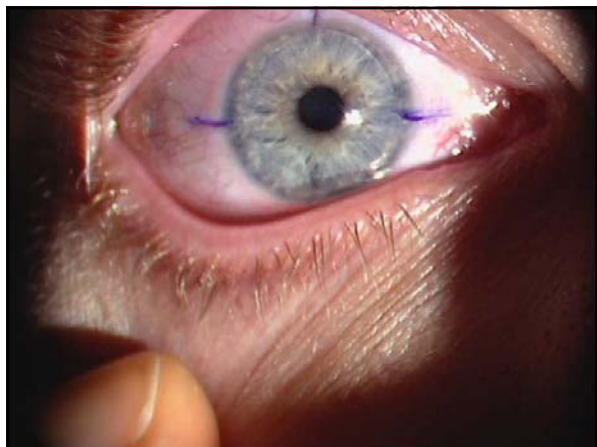
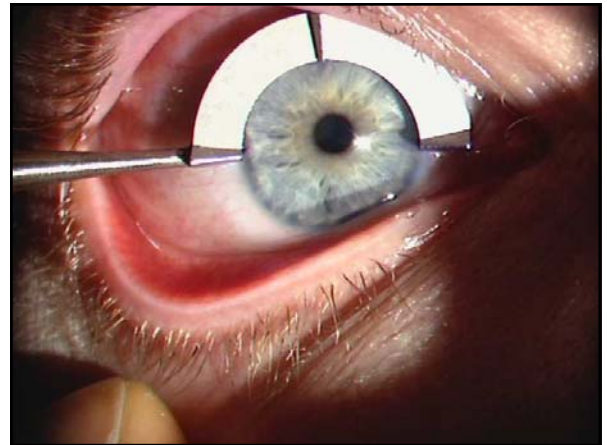
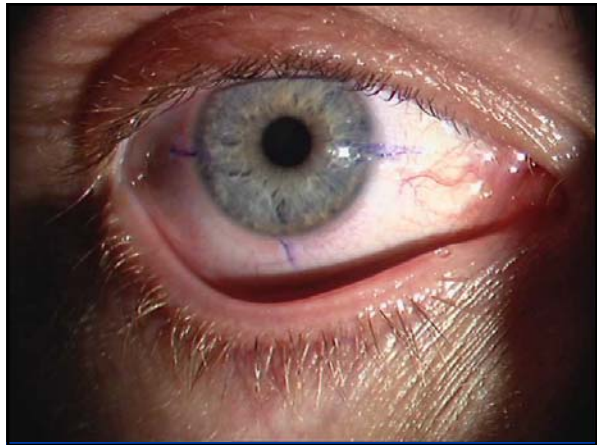
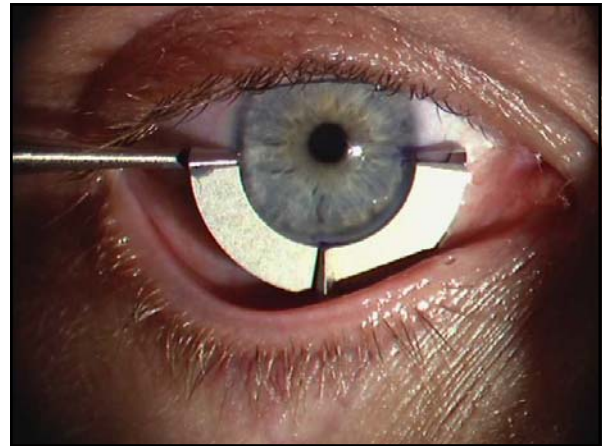
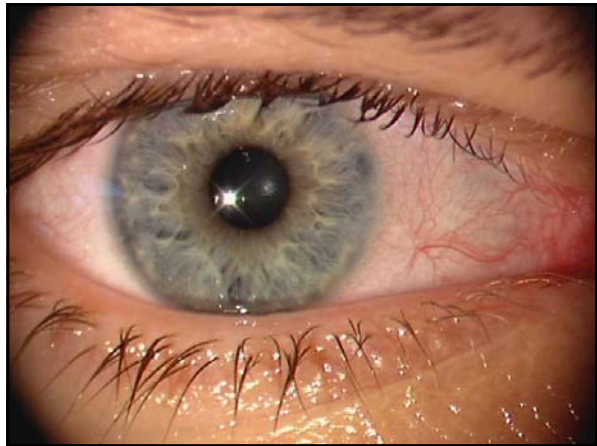
Surgeon Name	Jasvika
Patient Name	Gita Arun
Additional Patient Information (I.D., Case, etc.)	
Lens Details	AcrySof® Toric IOL
IOL Spherical Equivalent (SE)	17.5 D
Axis of Placement	90°
Cylinder Power (IOL Plane)	3.00 D
Cylinder Power (Corneal Plane)	2.06 D
Calculation Details	
Pre-Op Corneal Astigmatism	4.75 D X
Surgically Induced Astigmatism	0.00 D X
Corneal-Cylinder Result	4.75 D X
Anterior Residual Astigmatism	2.69 D X
Post-Op Information	
Flat K	44.88 D
@ Flat Axis	49.63 D
Steep K	90°
@ Steep Axis	0°
IOL Spherical Power (P-IOL)	17.5 D
Surgically Induced Astigmatism (SIA)	0.25 D
Incision Location (IL)	180°

OD (Right)

Steep Axis
Flat Axis
Incision

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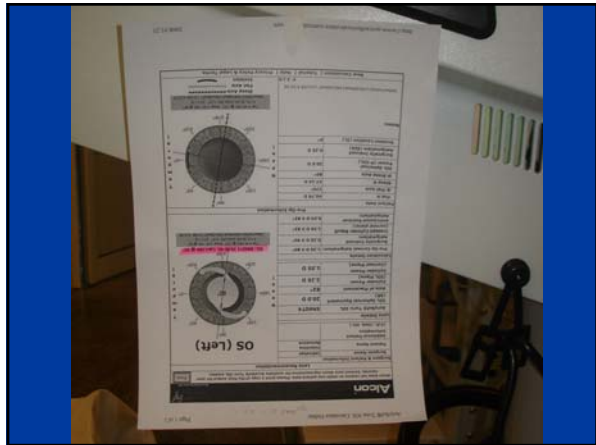




PREOPERATIVE PATIENT
EXAMINATION/PREPARATION

INTRAOPERATIVE
MANIPULATIONS

POSTOPERATIVE EVALUATION



INTRA-OP TORIC AXIS MARKING



CATARACT SURGERY AND IOL
IMPLANTATION

GROSS IOL ALIGNMENT
REMOVAL OF OVD
FINAL IOL ALIGNMENT

PREOPERATIVE PATIENT
EXAMINATION/PREPARATION

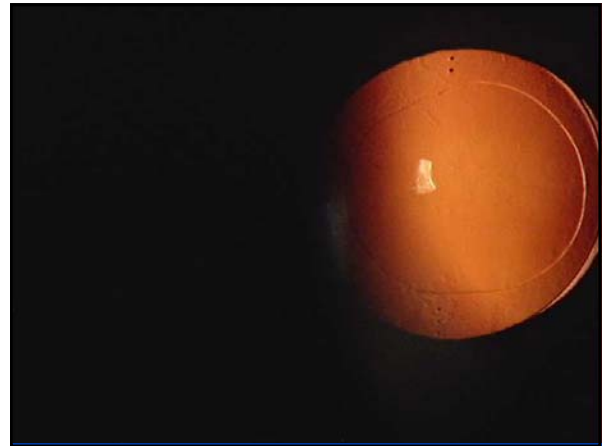
INTRAOPERATIVE MANIPULATIONS

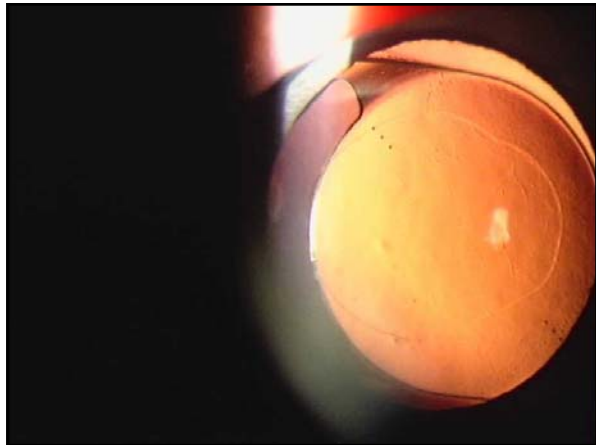
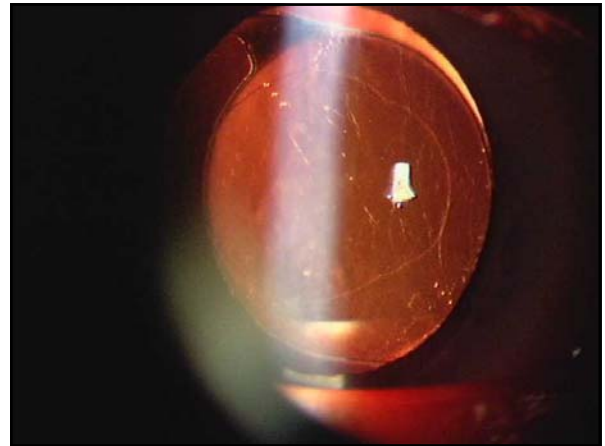
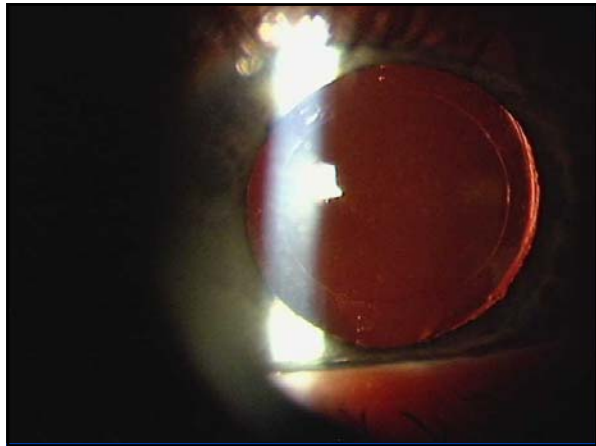
POSTOPERATIVE EVALUATION

ROTATION STABILITY

REFRACTOMETRY

CUMMULATIVE RESIDUAL
REFRACTIVE EYE
MISALIGNMENT





- IOL RELATED**
- IOL rotation
- SURGERY RELATED**
- Preop. Marking
 - Patient in horizontal position
 - Wide eyelids
 - Incision location
- EXAMINATION RELATED**
- One (two) investigators
 - Same conditions for examination
 - Manual machine

**23 EYES WERE OPERATED.
AGE OF PATIENTS WAS
FROM 35 TO 74 YEARS.**

K₁-K₂	IOL MODELS
3.61 ± 1.27	→ SA 60 T5 (n16)
1.64 ± 0.32	→ SA 60 T4 (n 4)
1.33 ± 0.16	→ SA 60 T3 (n 3)

- UCVA BEFORE SURGERY $0,12 \pm 0,08$
- BCVA BEFORE SURGERY $0,22 \pm 0,19$

IOL AXIS ROTATION (IN DEGREES):

- 1 day after surgery $1,73 \pm 1,21$
(max 4°) (<0,001)
- 1 month after surgery $1,79 \pm 1,55$
(max 4°) (<0,001)

RESIDUAL REFRACTION

IOL MODELS	1 day after surgery	1 month after surgery
SA 60 T5	1.14 ± 0.58	0.92 ± 0.64
SA 60 T4	0.56 ± 0.43	0.42 ± 0.42
SA 60 T3	0.50 ± 0.25	0.25 ± 0.50
Total	0.94 ± 0.57	0.90 ± 0.65

Dynamics of VA

	Before surgery	1 day after surgery	1 month after surgery
UCVA	0.12 ± 0.08	0.88 ± 0.23	0.85 ± 0.1
BCVA	0.22 ± 0.19	0.90 ± 0.22	0.92 ± 0.06

DYNAMICS OF VA

IOL models	1 day after surgery	1 month after surgery
	$\frac{UCVA}{BCVA}$	$\frac{UCVA}{BCVA}$
SA 60T5	$\frac{0.83 \pm 0.14}{0.85 \pm 0.12}$	$\frac{0.83 \pm 0.15}{0.87 \pm 0.11}$
SA 60T4	$\frac{0.98 \pm 0.05}{0.98 \pm 0.05}$	$\frac{0.97 \pm 0.06}{0.97 \pm 0.06}$
SA 60T3	$\frac{0.97 \pm 0.06}{0.97 \pm 0.06}$	$\frac{1,0}{1,0}$

CONCLUSION

- Is safe & predictable tool in refractive cataract surgery
- Rotation stability
- Alcon toric IOL seems a good option for moderate Ast correction

THANK YOU FOR ATTENTION

