

THE USE OF OCULOPRESSOR IN SHALLOW ANTERIOR CHAMBER CATARACT CASES

Zsolt Biró, MD, PhD
Tünde Kerek, MD
Katalin Aranyoss, MD
Pál Gyaki, MD

ST IMRE TEACHING HOSPITAL,
DEPARTMENT OF OPHTHALMOLOGY
BUDAPEST, HUNGARY

SHALLOW ANTERIOR CHAMBER

- HYPEROPIC EYES
- CONGESTIVE GLAUKOMA
- AFTER KERATOPLASTY
- AFTER FILTRATION SURGERY
- SWELLING CRYSTALLINE LENS
- UNKNOWN CAUSE (DUE TO AGING)
- WOMEN OVER 50 YEARS
- IRIDOCORNEAL ENDOTHELIAL SY

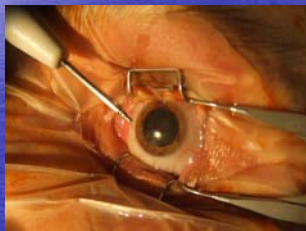


CATARACT SURGERY: CHALLENGE

- DIFFICULT TO PERFORM THE WOUNDS
- DIFFICULT TO PERFORM CCC
- ENDOTHELIAL DAMAGE => CORNEAL DECOMPENSATION

PREVIOUS SUGGESTION

- „BLIND” CORE VITRECTOMY THROUGH THE PARS PLANA, TO REMOVE SOME VITREOUS



DIFFICULTIES OF „BLIND” PPV

- NOT ENOUGH EXPERIENCE
- DAMAGE TO THE CRYSTALLINE LENS
- BLEEDING
- WOUND LEAKAGE
- VITREOUS INCARCERATION
- ENDOPHTHALMITIS

OCULOPRESSOR

- Prof. DÁNIEL VÓROSMARTHY
Oculopressor, an instrument for the production of intraocular hypotension
Klin. Monatsbl. Augenheilkd.
1967, 151(3):376-82.
- WIDELY USED IN THE ERA OF MANUAL CATARACT EXTRACTION (ICCE, ECCE)
- OCULOPRESSION FOR 10 MINUTES
- WAIT 15 MINUTES BEFORE SURGERY



OCULOPRESSION



WITH MANOMETER
(WILHELM DEUSCHMANN)



WITHOUT MANOMETER
(HONAN BALLOON)

MEASURING AC DEPTH



Visante OCT
(Zeiss)

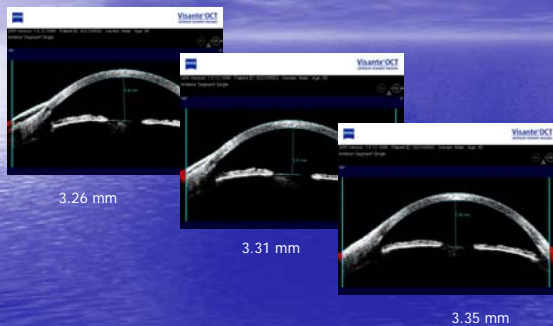


Ocuscan RxP
(Alcon)

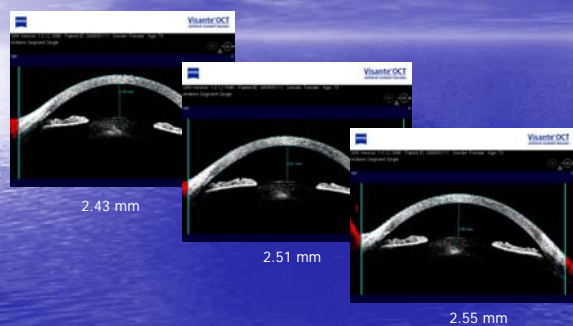
RESULTS

- AC Depth (ACD) before oculopression 2.313 mm (Axial length (Axl) 23.496 mm)
- ACD immediately oculopression 2.245 mm (Axl: 23.455 mm)
- ACD 15 minutes after oculopression 3.075 mm (Axl: 23.482 mm)

RESULTS



RESULTS



CONCLUSIONS

- Applying ocuopression for 10 minutes without peribulbar anaesthesia is safe.
- It is important to wait at least 15 minutes to start the surgery after the ocuopression is removed.
- ACD in most of the cases will be significantly deepened, to perform safer surgery, and to decrease the risk of endothelial cell damage.

CONCLUSIONS

- DEEPENING OF THE AC AFTER OCULOPRESSION IS MORE PRONOUNCED IN EYES WITH SHALLOW AC
- EVEN IF THE DEEPENING OF THE AC AFTER OCULOPRESSION IS NOT SIGNIFICANT, TO FILL UP AND TO DEEPEN THE AC WITH OVD IS MUCH EASIER, AND TO PERFORM THE SURGERY IS MUCH SAFER