RHEXIS OVALIZATION

U.M.Klemen
Wien,Radebeul/Dresden

Previous Observations

- Documentation of the alterations of the shape of the standart CCC (centric,+/- 0,5mm, diameter 5,0-5,5mm) after IOL implantation in > 1000 eyes
- Measured by a calibrated forceps
- Results compared by IOL design, -power,white-to-white distance

Previous Results

- No significant alteration in eyes with IOL power > 20,0 dptrs.
- Alterations up to 0,5mm in IOLs with +20,5 to 24,5 dptrs (0,45 mm ave.)
- Alterations up to 1,5mm in IOLs with > +25,0 dptrs.(0,95 mm ave.)
- INCOMPLETE OPTIC OVERLAPPING !

Purpose & Material

- Individual prospective evaluation of the ovalization in eyes with IOL power >+25 dptrs.
- 84 eyes of 72 individuals
- 2 three-piece IOLs (HOYA AF-1 (UY), AMO TECNIS) and 1 one-piece IOL (AMO TECNIS)

Distribution

IOL	Number	Dptrs.	Average
HOYA	36	+25,0-28,0	+26,5
TECNIS 3	30	+25,0-29,0	+26,1
TECNIS 1	8	+25,0-30,0	+26,0

CCC Deformation /Ovalization

IOL	Range	Average	360° over-lapping (%)
HOYA	1,0-2,0mm	1,55mm	19(52,3%)
TECNIS 3	1,0-1,5mm	1,35mm	18(60%)
TECNIS 1	0,5-1,0mm	0,65mm	8 (100%)

Conclusions

- 1-piece designed IOLs show significantely minor CCC deformation in short eyes in the dptrs. range higher than +25.0 ! (p=>0,005)
- Producers are requested to fit 3-piece IOLs > +25,0 dptrs. with smaller or more flexible haptic loops.