

THE STUDY OF CHANGE OF ANTERIOR CHAMBER ANGLE AND POSITION OF INTRAOCULAR LENS AFTER CATARACT SURGERY

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We measure the change of ant. chamber angle and depth in 40 patients with cataracts by Scheimpflug photography-- "Ant. segment analysis of eye" before and after phacoemulsification. There are two groups depending on the types of IOL in our study-- "hard PMMA" and "soft foldable silicon" IOL, and we examine the stability of them after cataract surgery.

The result indicates the average nasal ant. Chamber angle of PMMA group is $28.31 \pm 5.59^\circ$ before surgery; $39.23 \pm 6.09^\circ$ in 8 weeks after surgery. The average temporal ant. chamber angle is $27.83 \pm 6.50^\circ$ before surgery; $37.29 \pm 4.89^\circ$ in 8 weeks after surgery. The average ant. chamber depth of PMMA group is 2.66 ± 0.42 mm before surgery; 3.92 ± 0.34 mm in 8 weeks after surgery. The ant. chamber angle

and depth of two groups both increase significantly in one and eight weeks after surgery. But there are no significant statistical differences between PMMA group and silicone group. This result should be positive for patients with glaucoma to receive cataract surgery.

The average tilt of IOL in PMMA group is $2.57 \pm 1.34^\circ$ in 8 weeks after surgery, and the average decentration of IOL is 0.41 ± 0.18 mm; the average tilt of IOL in silicon group is $4.25 \pm 2.37^\circ$ in 8 weeks after surgery, and the average decentration of IOL is 0.72 ± 1.04 mm. However, we need more cases collected and discussed to know whether tilt and decentration occur more commonly in silicon IOL or not.

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