

Session 2-G: Cataract/Refractive: RLE, Bioptics, ICL

Title: Risk Factor for retinal Detachment After Clear Lens Replacement

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PURPOSE: To determine the retinal detachment (RD) rate, and risk factors for RD, in a consecutive series of myopic clear lens replacement patients, as well as examine the safety and efficacy of clear lens replacement in a subset of 163 eyes.

METHODS: This retrospective study included 346 eyes of 200 myopic patients (23.17-33.37 mm) operated on between July 1997 and May 2003 at St. Luke's Cataract and Laser Institute, Tarpon Springs, Florida. A subset of 163 eyes with at least 330 days follow-up was analyzed for basic outcomes.

RESULTS: Follow-up was 4 to 1834 days; mean was 405 (sd=398). Five eyes of four patients experienced RD (1.4%). Two of five RDs occurred following nd:YAG capsulotomy. Axial lengths of the RD cases were 25.11 – 26.81 mm. One RD had a prior retinal hole. In a subset of 163 eyes with 11 months follow-up, spherical equivalent preoperatively was -18.50 D to -0.75 D, mean was -6.13 D (sd=3.54), postoperatively from -3.00 D to +1.00 D, and mean was -0.42 D (sd=0.82). Sixty-two percent of cases were within 0.5 D of target, 89% were within 1 D, 97% were within 1.5 D.

CONCLUSIONS: Of the patients who incurred RD, none had axial lengths greater than 27 mm. Patients with moderate axial lengths (25 to 27 mm) may be at greater risk for RD. Prophylactic treatment of eyes with RD risk factors, such as holes or lattice degeneration, may prevent RD following clear lensectomy.