

## Risks and complications of cataract surgery in uveitis

**Purpose:** To determine the rate of complications in cataract surgery in uveitis

**Methods:** Retrospective data was gathered on subjects attending uveitis clinic at Auckland District Health Board between 2008 and 2020. Data was collected in Microsoft Excel and analysed in STATA.

**Results:** A total of 471 eyes of 371 subjects with uveitis underwent phacoemulsification surgery. Median duration of uveitis prior to cataract surgery was 3.0 years (interquartile range 1.4 – 6.6) and median period of quiescence prior to surgery was 1.0 years (interquartile range 0.5 – 2.0). Intra-operative posterior synechiae peel was required in 152 eyes (32.3%) and pupil management in 116 eyes (24.6%); most commonly iris hooks and vision blue. Intra-operative complications occurred in 32 eyes (6.8%). No factors for intra-operative complications were significant on multivariate analysis. Twelve month follow-up was available for 311 eyes (66.0%). By 12 months was 6/12 or better in 248 eyes (79.7%). The most common complication was uveitis flare, occurring in 266 eyes (56.5%); time of quiescence was associated with reduced risk of flare (HR 0.794  $p = 0.003$ ). Post-operative cystoid macular oedema (CMO) occurred in 56 eyes (11.9%) with 45 eyes developing CMO within six months. There are no risk factors significantly associated with CMO development.

**Conclusion:** Cataract surgery in uveitis is more complex, often requiring additional procedures. However, the overall complication rate in this cohort was still low. The primary challenge is in post-operative care, managing the high rate of prolonged inflammation, recurrent uveitis flares and CMO. Ensuring a period of pre-operative quiescence and ongoing monitoring post-operatively is paramount.