

PROGRESSION OF AGE-RELATED MACULAR DEGENERATION AFTER CATARACT SURGERY IN PATIENTS WITH A BLUE BLOCKING INTRAOCULAR LENS IN ONE EYE AND A CLEAR INTRAOCULAR LENS IN THE FELLOW EYE

Purpose:

We aimed to compare the rate of progression of age-related macular degeneration (AMD) in patients implanted with a blue blocking intraocular lens (IOL) in one eye and a clear UV-filter IOL the fellow eye.

Methods:

A prospective non-randomized case-control pilot study was conducted on patients undergoing consecutive bilateral cataract surgery with implantation of a clear IOL in one eye and a blue-blocking IOL in the fellow eye within 1 year. All surgeries were performed by one surgeon with nucleus pre-chop and minimal phaco-emulsification energy. Fundus photographs were taken at the 1 month post-operative follow-up, and at 1 and 2 years follow-up. Clinical age-related maculopathy staging system (CARMS) was used to grade AMD. Grading was conducted by two independent ophthalmologists.

Results:

A total of 128 patients (256 eyes) were included in the study. Mean age of patients was 74 years. The mean duration between consecutive cataract surgeries was 307 days. The mean duration of follow-up was 25.9 months. The mean CARMS grade for eyes implanted with clear intraocular lens and blue blocking intraocular lens were similar pre-operatively (grade 2a). At the end of the period, there were no significant difference in progression of AMD in eyes with a clear UV-filter IOL and fellow eyes with a blue blocking IOL ($p = 0.45$).

Conclusions:

We found no significant difference in the progression of AMD in eyes of patients implanted with a clear IOL and a blue blocking IOL two years after cataract surgery. Longer term follow-up is required.