DOES THE VISUAL PERFORMANCE OF PATIENTS FOLLOWING CATARACT SURGERY VARY ON DIFFERENT TYPE OF IOLS?

Department of Ophthalmology Warsaw Medical University, Warsaw, Poland

Purpose: The aim of our study was to compare the visual performance of patients following bilateral cataract extraction with implantation of three different intraocular lenses (IOL).

Methods: A total of 35 cataracts patients (age range: 33-79 years) were included in this prospective study. All patients underwent cataract surgery in the Ophthalmology Department Warsaw Medical University, Poland. Patients were assigned to one of the following three groups: group 1, eyes implanted with the monofocal IOL Acrysof SA60AT (20 eyes); group 2, eyes implanted with the monofocal aspheric IOL Acrysof SA60WF (24 eyes); group 3, eyes implanted with the multifocal hybrid IOL AcrySof Restor SN6AD3 (26 eyes). The computer visual tasks were used to evaluate the visual performance and reading fatigue. The follow-up tests were performed in the intervals of one, two and three months. All patients fulfilled a questionnaire concerning subjective visual fatigue.

Results: Uncorrected distance visual acuity improved significantly in all groups. Best distance corrected visual acuity (BDCVA) - logMar chart - at distance one month after surgery was: average 0.63 monocularly and 0.73 binocularly for the group 1, 1.0 monocularly and 1.19 binocularly for the group 2, and 1.0 monocularly and 1.06 binocularly for the group 3. BDCVA (logMAR chart) for near was average: 0.63 for the group 1 and 1.0 for groups 2 and 3. Contrast sensitivity (Pelli-Robson chart) was average 1.65 for the group 1 and 1.95 for group 2 and 3 one month after cataract extraction.

Conclusions: Our preliminary results indicate that monofocal and multifocal IOLs provide comparable visual performance. In eyes with Restor IOL, the diminished in contrast sensitivity and UCVA were observed.