Alla A Ryabtseva et al., J Clin Exp Ophthalmol 2018, Volume 9
DOI: 10.4172/2155-9570-C8-099

Outcomes of a trifocal intraocular lens implantation in patients with diabetic retinopathy

Alla A Ryabtseva, Sergey G Sergushev and **Elena N Khomyakova**
Moscow Regional Research Clinical Institute of M F Vladimirsky, Russia

Purpose: The purpose is to evaluate the visual outcomes after bilateral implantation of a trifocal intraocular lens in patients with proliferative diabetic retinopathy (PDR).

Setting: All intraocular lens (IOL) implantations were performed at the Ophthalmology Department, Hanoi Russ-Viet Medical Hospital (Mat Viet-Nga), Vietnam.

Methods: This prospective study comprises results after bilateral implantation of the new trifocal aspheric TECNIS Symfony IOL model ZXR00 (Abbott Medical Optics) in 9 patients (18 eyes) with PDR. Diabetes mellitus was in the stage of compensation in all patients. All patients underwent an uneventful cataract surgery followed by IOL implantation by a single surgeon. Postoperative examination including uncorrected distance visual acuity (UDVA), near visual acuity (NVA) and intermediate visual activity (IVA) at 40 cm and 60 cm; defocus testing and spectacle independence was performed.

Results: The mean postoperative binocular UDVA, IVA and NVA at 3 months were 0. 1 log MAR±0.16 (SD), 0.05±0.04 log MAR, and 0.02±0.03 log MAR, respectively. Preoperative spherical equivalent (SE) was +0.22±2.04 D (range: -3.44 to +1.75 D) and postoperative spherical equivalent was -0.19±0.4 (range: -0.75 to 0.13 D). Binocular defocus curve showed best visual acuity (VA) at 0.2 Log MAR or better in the range of +1.5 D to -2.5 D of defocus. 83.3% of patients reported complete spectacle independence and no longer used correction in the far, intermediate, or near distance.

Conclusions: Our study showed that the new-generation trifocal IOL provided high distance, intermediate, and near vision with high rates of spectacle independence in patients with proliferative diabetic retinopathy.

Biography

Alla A Ryabtseva is a Doctor of Medical Sciences, Professor, Honoured Doctor of the Russian Federation. An Ophthalmologist, Head of the Ophthalmologic Department of the MONIKI of M F Vladimirsky, Main ophthalmologist of Moscow Region and of the Central Federal District of Russia, a member of editorial councils of the Russian Ophthalmology Journal, Russian Pediatric Ophthalmology and of the Almanac.

Notes: