Editorial

This Issue at A Glance

Determining a correct method to calculate intraocular lens (IOL) power in ketatoconic (KC) eyes has been always a challenge.[1] In this issue of IRJO, in a prospective study titled "Comparison of refractive outcomes of different intraocular lens power calculation formulas in keratoconic patients undergoing phacoemulsification" Zare Mehrjerdi et al have tried six well-known formulas: Haigis, Holladay 1 and 2, Hoffer Q, SRKII and SRKT on 20 eyes with cataract and KC. They concluded the SRKII formula can be considered the most reliable in all stages of KC.

Hashemi et al have presented their investigation "The distribution of ocular biometry in Iranian school children". Study was done on 434 cases in a population of 14 to 20-year-old Iranian students in the high schools of Aligoodarz using multiple simple cluster sampling. Biometric components were measured using multiple simple cluster sampling. Biometric components were measured using Allegro Biograph. They found that anterior chamber depth in this study was shorter and white to white corneal diameter was larger than previous studies done in different countries. It has been already reported that ocular biometrics can be affected by race, genetics, and environment factors.[2] Biometric changes not only provoke refractive variations but their recognition is very helpful in certain operations such as cataract surgery.

Simsek et al from SB Ankara Ulucanlar Eye Education and Research Hospital have presented a very interesting and informative article "Color Doppler imaging of ocular hemodynamic alterations in patients with manifest hyperopia". Forty eyes of 40 hyperops have been compared with 40 eyes of emmetrops. The flow velocities and resistance indices have been measured in ophthalmic artery (OA), central retinal artery (CRA), posterior ciliary artery (PCA), central retinal vein (CRV) and superior ophthalmic vein (SOV). They reported that the resistance value in the OA and the mean velocities in the SOV have been significantly higher in hyperops compared to emmetropic eyes. It has been shown already that hyperopic eyes have thicker eye walls and shorter eyes.[3] Retinal vein occlusion[4] and exudative age-related macular degeneration[5] have been more frequently reported in these cases. Increased resistance indices causing increased choroidal vascular resistance and consequently would cause pathologic angiogenesis in hyperopic eyes.[6]

"Heterophoria and fusional reserves changes after photorefractive keratectomy for myopia" is the subject that Etezad Razavi and colleagues from Mashhad University have looked at and presented here. In this prospective work 96 myopic eyes (-1 to -7 Diopters) have been treated with aspheric and wavefront guided PRK, fusional amplitudes and hetrophoria were measured before and after surgery (up to six months). Fusional amplitudes were measured from near and far by rotary prism and hetrophoria by near Maddox wing. They have found that far and near convergence amplitude were decreased significantly at six months. The other fusional reserves were decreased initially but returned to preoperative values at six months. Complications such as binocular diplopia have been reported after PRK.[7] The ophthalmologists should be aware of such complications and they should include ophthalmic examinations in their investigations to inform their patients about such complications and to be ready to face such conditions.

Andalib and coauthors have presented "The effect of successful surgical alignment on improvement of binocular vision in adults with childhood strabismus". In a prospective interventional investigation 34 patients with horizontal strabismus and with successful alignments have been included. They report that there was improvement in binocular vision in 58.8% of patients in Bagolini and Worth-4-dot test. They found no significant correlation between the duration of strabismus and postoperative results. The results were better in exotropic group (65%) compared to esotropic (50%). They found that the angle of preoperative deviation had no influence on the final results.

In an article titled "Isolation and genotyping of acanthamoeba strains from corneal scraps", Ghamilouie et al have studied corneal scraping specimens that they obtained from keratitis patients examined for Acanthamoeba and investigated its genotype identification. Five clinical

specimens (5.6%) out of 89 collected samples showed positive Acanthamoeba by culture in non-nutrient agar (NNA) followed by PCR. All five cases were confirmed by confocal microscopy. The authors propose that culture in NNA is a reliable diagnostic and economical method and could be used in areas with limited ophthalmic equipments such as confocal microscopy.

Although central serous chorioretinopathy (CSCR) is self limiting and regresses spontaneously in most cases, in some rare forms it needs some specific treatments such as beta-blockers, photodynamic therapy etc. Sabouri et al evaluated the therapeutic effect of rifampin for acute CSCR. Ravage and colleagues in an observation described the clinical improvement of chronic CSCR in a patient treated with rifampin for tuberculosis. Thereafter they treated several CSCR patients with rifampin 600 mg/day for 1 to 4 weeks.[8] In the present study they have treated 23 CSCR patients with the same dose for 4 to 6 weeks and compared them with 17 non-treated CSCR. In the treated group macular thickness reduction was significantly more than the control group (non-treated), p=0.018. At the end of the study macula in 45.5% of the treated group and 29.4% of control group had dried out.

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