



This issue at a glance



It is my pleasure to announce that our first issue of Journal of Current Ophthalmology (J Curr Ophthalmol) being hosted by Elsevier B.V. and is appearing on their site. This is a highly valuable promotion for our journal which has been published since 1969 with the name Iranian Journal of Ophthalmology (IRJO) under the guidance of the late Professor M. G. Chams and his followers. I am certain that this decision of the Iranian Society of Ophthalmology (IRSO) will be a step forward for our journal.

In this issue of J Curr Ophthalmol, Vahedian et al have presented “Pseudoexfoliation syndrome: effect of phacoemulsification on intraocular pressure and its diurnal variation”. Pseudoexfoliation syndrome (PEX) is characterized by accumulation of fibrillary material on lens capsule, anterior chamber angle, etc., causing cataracts and glaucoma. In this prospective study, the authors investigated the effect of phacoemulsification of the cataract lens on intraocular pressure (IOP) and particularly on the diurnal variation of IOP, which could be very damaging for the optic nerve. They presented sixty-eight eyes of 68 patients. The mean IOP dropped from 17.45 mmHg to 12.57 mmHg after six months of intervention. The mean of diurnal IOP variation dropped from 5.06 to 1.49 mmHg after this period. This significantly correlated to baseline IOP variation ($p < 0.001$) and not to age or CCT. IOP and high diurnal IOP variation in all eyes with PEX are considered a risk factor for the development of glaucoma.¹ Therefore, such intervention could be highly beneficial to prevent its development and progression in both normal and glaucomatous eyes with PEX.

Mokhtari-Payam and coauthors have presented “Cost-effectiveness analysis of Confocal Scan Laser ophthalmoscope (HRT II) versus GDx for diagnosing glaucoma”. This investigation was done in 1912 in two important eye hospitals in Tehran. At Noor Hospital, HRT II was used for all glaucoma suspects, but at Farabi Eye Hospital, GDx was applied for all glaucoma patients. The cost effectiveness and accuracy of each technique was investigated after one year. It is noteworthy that HRT measures the topography of the optic nerve head (ONH) and does not differentiate between different layers of the retina while GDx measures relations which depend on retinal nerve

fiber thickness.^{2,3} They concluded that although GDx is more accurate and costly, HRT II provides diagnostic accuracy at a lower cost than GDx.

Hashemi et al present “White-to-white corneal diameter distribution in an adult population”. In this cross-sectional population-based study, the authors investigated 4787 adults aged 40–64. The details of the method of study have been published elsewhere.⁴ White-to-white (WTW) corneal diameter was measured by the LENSTAR/BioGraph, and the mean WTW corneal diameter in the population of the north of Iran was found to be 11.80 mm (range, 10.8–12.8 mm). The authors expressed that “low age, thinner cornea, longer axial length, thicker lens, and flatter cornea were significantly related to higher WTW corneal diameter”. They found a significant shift of hyperopia in higher WTW corneal diameter. Knowledge of WTW diameter has some important applications in ophthalmology.⁵ Although racial and ethical factors influence WTW diameter, the influence of sex remains controversial.

Lotfi et al from Tabriz introduce “Outcome of intrastromal corneal ring segment relative to depth of insertion evaluated with scheimpflug image”. In this retrospective observational study of 27 keratoconic eyes, KeraRing SI-5 was implanted via mechanical tunnels, and patients were followed for 8.8 months. The aim was to determine if the insertion depth influenced the outcome of surgery. 41.4% of the rings were found at 40–59% of the depth of anterior thickness of cornea, 51.7% in 60–79% depth, and only 6.9% in 80% or more. In all cases, the insertion was effective, and the visual acuity improved 2 to 3 lines. KeraRing is minimally invasive, safe, and stable.^{6,7}

In the study titled “Comparison of quality of life between myopic patients with spectacles and contact lenses, and patients who have undergone refractive surgery” by Shams and coauthors, the Iranian translation⁸ of the questionnaire of evaluation instrument of refractive errors in quality of life (NEI/RQL-42) was used, which included 13 different subgroups (scored between 0 and 100). The questions concerned vision-related quality of life. The process of gathering data included the questionnaire, interview, and observation. The aim was to evaluate the comparative quality of life in myopic patients who wore glasses or contact lenses and those who had undergone refractive surgery for myopia, and to compare them

Peer review under responsibility of the Iranian Society of Ophthalmology.

with a control group of emmetropes. They included 154 patients with spectacles or contact lenses, 32 of whom had undergone surgery and 54 cases of emmetropes (control group). Overall the score of the control group was the highest, and that of the group wearing spectacles or contact lenses was the least.

Asadi-Amoli and Ghanadan from the Department of Pathology of Tehran University of Medical Sciences present “Survey of 274 patients with conjunctival neoplastic lesions in Farabi Eye Hospital, Tehran 2006–2012”. In this retrospective analysis, the result of seven years (2006–2012) of anatomopathology of 274 conjunctival neoplasms is shown. 65.3% of the specimens were from males, and the mean age of patients was 57.9 years (range, 14–90 yrs). Ocular squamous neoplasias (OSSN) is a new terminology used for precancerous lesions to invasive carcinoma. In their presentation, the most common lesion was invasive squamous cell carcinoma of conjunctiva (SCCC) at 40.8%, followed by dysplasia at 17%. Of 274 lesions, 159 (58%) were malignant, 68 (24.8%) were precancerous, and 47 (17.1%) were benign. SCCC is nearly two times more frequent in males. The high rate of SCCC in Iran can be attributed to high exposure to ultraviolet light in this region. The present data was compared to that of 1990–2004, indicating that the incidence of precancerous lesions has increased (22.1% vs 24.8%) and that of SCCC has decreased (59% vs 40.8%), which could be due to preventive measures and early treatment. In fact, SCCC is a rare cancer, the incidence of which is reported between 0.02 and 3.5 per 100,000 population.^{9,10}

Naseripour et al have presented their investigation on “Monosomy 3 by chromogenic in situ hybridization (CISH) in Iranian patients with uveal melanoma”. Fifty patients with large uveal melanoma were enucleated. Of these, four patients (8%) were identified to have monosomy of C3. After a mean follow-up of 5.3 years, only one patient with monosomy 3 died. The low rate of monosomy C3 and low mortality rate may be an indication of a better prognosis of uveal melanoma in Iran. In Frecher et al report on chromosomal monosomy c3, a very high mortality rate was reported.¹¹ In Naseripour's report, 86% of tumors were of mixed type, which has the worst outcome. The low mortality rate of melanocarcinoma of choroid in Asiatic countries^{12,13} brings up the role of race as a leading prognostic factor.

Chams and coauthors have presented “Ophthalmic findings in Behcet's disease: cases without apparent ocular signs”. Their aim was to evaluate the fluorescein angiography (FA) of an extensive area of retina by montage fluorescein angiography (MFA) in patients with confirmed incomplete Behcet's disease (BD) (according to Japanese criteria) and without apparent ophthalmic signs, investigated by biomicroscopy, 3-mirror of Goldmann and indirect ophthalmoscopy. In this prospective, non-interventional case series, fifty BD patients (100 eyes) were enrolled. None of them had apparent ophthalmic manifestations. In MFA, 22 cases (44%) presented FA leakage in both eyes, particularly from the final branches of retinal vessels. Four patients had minimal leakage from the optic disc and one from the posterior pole. Retinal vasculitis is a frequent

manifestation in BD.¹⁴ It is a major risk factor causing blindness in ocular BD.¹⁵ Early recognition of retinal vasculitis can be a useful element for the diagnosis of BD and is, in fact, one of the four major diagnoses criteria. To show retinal vasculitis by MFA can help us for early diagnosis and early treatment in order to prevent the undesirable blinding outcome of the disease.

Epidemiological studies have important role in understanding the etiology and current situation of ocular disease. Norouzirad et al presented “The prevalence of refractive errors in 6- to 15-year-old schoolchildren in Dezful, Iran”. They found prevalence of myopia, hyperopia, and astigmatism to be 14.9%, 12.9%, and 45.3%, respectively. The results are slightly different from previous report from the same region in 2005.¹⁶

Ostadimoghaddam and coauthors have presented “Eye problems in children with hearing impairment”. They used a cross-sectional, cluster sampling method in four schools for the deaf in Mashhad by selecting 254 children and compared them with 506 normal children (control group). Their aim was to detect eye problems, such as refractive errors, amblyopia and strabismus, in deaf children and compare it with those of normal children. They showed that the mean spherical value was significantly higher in the study group ($p < 0.001$). The prevalence of hyperopia was 57.15 in study group and 21.5% in normal cases. The mean cylindrical value was significantly higher in deaf children ($p = 0.002$). 12.2% of the deaf children were amblyopic compared to 1.2% of the control group ($p < 0.001$). 3.1% of children and only 2.6% of normal children had strabismus. This investigation has shown that more than half of the deaf children in these four schools had had ocular problems. Although this finding has been indicated in other studies,¹⁷ the authors request more attention to the visual problems of these children to prevent further difficulties in their lives.

Hormoz Chams, MD

Senior Editor, Journal of Current Ophthalmology

References

1. Koz OG, Turkcu MF, Yarangumeli, A, et al. Normotensive glaucoma and risk factors in normotensive eyes with pseudoexfoliation syndrome. *J Glaucoma* 2009;18:684–688.
2. Bartsch DU, Intaglietta M, Bille JF, Dreher AW, Gharib M, Freeman WR. Confocal laser tomographic analysis of the retina in eyes with macular hole formation and other focal macular diseases. *Am J Ophthalmol* 1989;108:277–287.
3. Lan Y-W, Henson DB, Kwartz AJ. The correlation between optic nerve head topographic measurements, peripapillary nerve fibre layer thickness, and visual field indices in glaucoma. *Br J Ophthalmol* 2003;87: 1135–1141.
4. Fotouhi A, Hashemi H, Shariati, M, et al. Cohort profile: Shahroud Eye Cohort Study. *Int J Epidemiol* 2013;42:1300–1308.
5. Hoffer KJ. Clinical results using the Holladay 2 intraocular lens power formula. *J Cataract Refract Surg* 2000;26:1233–1237.
6. Siganos CS, Kymionis GD, Kartakis N, Theodorakis MA, Astyrakakis N, Pallikaris IG. Management of keratoconus with Intacs. *Am J Ophthalmol* 2003;135:64–70.

7. Nose W, Neves RA, Schanzlin DJ, Belfort Junior R. Intrastromal corneal ring—one-year results of first implants in humans: a preliminary nonfunctional eye study. *Refract Corneal Surg* 1993;9:452–458.
8. Pakpour AH, Zeidi IM, Saffari M, Labiris J, Fridlund B. Psychometric properties of the national eye institute refractive error correction quality of life questionnaire among Iranian patients. *Oman J Ophthalmol* 2013;6:37–43.
9. Pe'er J. Ocular surface squamous neoplasia. *Ophthalmol Clin North Am* 2015;18:1–13. review.
10. Peralta R, Valdivia A, Estañol, P, et al. Low frequency of human papillomavirus infection in conjunctival squamous cell carcinoma of Mexican patients. *Infect Agent Cancer* 2011;18:24.
11. Prescher G, Bornfeld N, Hirche H, Horsthemke B, Jockel KH, Becher R. Prognostic implications of monosomy 3 in uveal melanoma. *Lancet* 1996;347:1222–1225.
12. Biswas J, Kabra S, Krishnakumar S, Shanmugam MP. Clinical and histopathological characteristics of uveal melanoma in Asian Indians. A study of 103 patients. *Indian J Ophthalmol* 2004;52:41–44.
13. Hu DN, Yu GP, McCormick SA, Schneider S, Finger PT. Population-based incidence of uveal melanoma in various races and ethnic groups. *Am J Ophthalmol* 2005;140:612–617.
14. Ozdal PC, Ortaç S, Taşkintuna I, Firat E. Posterior segment involvement in ocular Behçet's disease. *Eur J Ophthalmol* 2002;12:424–431.
15. Chams H, Behboudi H, Ghassemi F, Davatch F, Shahram F, Chams-Davatchi Ch. Causes of blindness in ocular Behçet's disease comparing the end-blinding results in two genders. *Iran J Ophthalmol* 2012;24:3–10.
16. Fotouhi A, Hashemi H, Khabazkhoob M, Mohammad K. The prevalence of refractive errors among schoolchildren in Dezful. *Iran Br J Ophthalmol* 2007;91:287–292.
17. Onakpoya OH, Omotoye OJ. Screening for ophthalmic disorders and visual impairment in a Nigerian school for the deaf. *Eur J Ophthalmol* 2010;20:596–600.