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### This Issue at A Glance

The aim of the Iranian Journal of Ophthalmology (IrJO), published since 1947 has been to promote the quality of the journal, and to have a small part in the progression of the ophthalmic sciences in the world. We do expect and demand our colleagues from Iran and abroad to help us to achieve this precious goal. We are thankful to all those who have so far cooperated with us, our professional staff, editorial board, reviewers and particularly the faithful authors who have done their best to nourish our journal.

Now the Iranian Society of Ophthalmology has decided to take a further step to improve the presentations and internationalization of IrJO by inviting Elsevier B.V. a worldwide known organization to host and share the responsibility of our journal. Therefore in the near future our journal will be viewed on Elsevier website, and here in Iran it will be published in a limited number for those who desire to receive the journal.

In this issue of IRJO Hashemi et al are concerned about residents' education particularly in cataract surgery, phacoemulsification. "Revisiting the cataract surgery curriculum for ophthalmology residents: a narrative review". One of the most common intraocular operations done by residents which may have many complications such as posterior capsule rupture (PCR). They have suggestion to reduce such complications. The rate of PCR has decreased considerably during the past 10 years. They explain that the Iranian residents mostly use assimilator style of learning relay on diagrams, lectures, and self-teaching materials.<sup>1</sup> Today active learning and problem-solving is more educative.<sup>2</sup> The first year residents in Iran are not allowed in the operation rooms while in 2002 75% of the first year residents in USA participate and assisted operations and 40% of them exercised surgeries.

Khorrami Nejad et al have visited the schools of deaf boys in Tehran to report "The prevalence of refractive errors and binocular anomalies in students of deaf boys schools in Tehran". Examining 158 boys, they found anomalies in 52.8% of students. Astigmatism was the highest, 31%. In Iran the prevalence of astigmatism in normal school has been reported to be 4.8% to 18%.<sup>3</sup> Anisometropia 19%, while it has been reported to be 3.7% in normal schools.<sup>4</sup> Amblyopia was reported to be 13.9% in deaf schools. In Iran it has been found to be 0.9% to 4.3%.<sup>3</sup> In this report 11.3% had strabismus. 1.3% to 3.7% has been the normal range in Iran.<sup>5,6</sup> They found that ocular abnormalities increased with severity of deafness which requires a special care for these children.

In an article titled "Can OCT pachymetry identify keratoconus suspects?" Mohammadian and coworkers have investigated 32 keratoconus (KC) suspects and 36 healthy eyes using OCT Visante. In all cases a significant difference was observed. The KC patients had a thinner cornea and had more variations and changes in corneal thickness. They propose that anterior segment OCT could be used to detect KC, along the other sophisticated instruments.

Jahadihosseini and coauthors have presented "Comparison of two methods for the treatment of primary pterygium: amniotic membrane transplantation plus intraoperative mitomycin C, versus conjunctival rotational autograft plus intraoperative mitomycin C". Ninety-two eyes of 92 patients have been randomized in two groups. Forty-three eyes in amniotic membrane transplantation (AMT) and 49 eyes in conjunctival rotational autograft (CRA) groups. There has been no significant difference in sex, age, pterygium size and follow-up period. The mean conjunctival size of the lesion in AMT group has been 3.4 mm and in CRA group 3.3 mm. After 10 months of follow-up they have observed 20.93% of recurrence in AMT and 8.16% in CRA group. In their discussion they express that although the pathogenesis of pterygium is not known<sup>7</sup> but ultraviolet exposure can have a role in pterygium formation.<sup>8</sup> They conclude that although no statistical significant difference was observed in these two methods but the recurrence rate was less in the CRA group.

Sedaghat and Abrishami from Mashhad University of Medical Sciences have presented their investigation "Comparison of amplitudes of fusional vergence in patients with asthenopic and asymptomatic near exophoria". In this cross-sectional analysis they have studied 102 patients with near exophoria and asthenopia, and compared them (control group) with 86 near exophoric patients without any symptoms. They have excluded hyperopes and all patients have had vision of  $20/25$  or better. The

patients' age was 15 to 35 years and the mean age was similar in both groups. They found significant difference in near negative fusional vergence (NFV), NFV recovery and far NFV recovery between the two groups. They explain that although it was assumed that asthenopia is caused by convergence insufficiency,<sup>9</sup> it seems that asthenopia in patients with near exophoria can be provoked by increased amplitude of negative vergence. They conclude that CI frequency causes asthenopia but increased NFV amplitude may also be involved in this process.

The article titled "Age-related macular degeneration in an Iranian population" presented by Hashemi and coauthors has been derived from the first phase of the Shahroud Eye Cohort Study conducted in Iran. In this cross-sectional urban population, using multistage cluster sampling in 2009-2010, 6,311 cases have been selected. They were 40 to 64 year-old. The prevalence of age-related macular degeneration (AMD) was found to be 4.7% (3.1% bilateral, 1.6 unilateral). It was significantly more frequent in older age 2.2% in (40-44 year-old), 8.5% (60 to 64 year-old), male sex (5.5% males, 4.2% females) and shorter ocular axial length. The prevalence of AMD in Iran was found lower from both American and European studies.<sup>10,11</sup>

"Neuromyelitis optica and nucleotide variations of Aquaporin-4 gene" has been presented by Miri et al from the Neurological Research Center of Theran University. Neuromyelitis optica (NMO) an autoimmune and rare disease caused by deposition of anti-aquaporin-4 (AQP4) IgG in central nervous system. When AQP4 – antibody is not found in the serum is called seronegative NMO. Although, the clinical manifestation and response to treatment are similar in both cases. In this work 24 seronegative cases have been investigated. The frequency of nucleotide variations was found to be similar to previous reports. However, a variation was found in 7% of the alleles in the intronic region between exon 1 and 2 which could affect antigenicity of AQP4 and play a role in the clinical and immunological presentation of the disease.

Taghavi and coauthors have conducted a study titled "Comparison of intravenous lidocaine versus hyoscine on prevention of oculocardiac reflex in strabismus surgery" to compare the effects of intravenous lidocaine and hyoscine in reducing the rates of occurrence of oculocardiac reflex (OCR) during strabismus surgery. They showed that although both drugs were somewhat effective in reducing the rates of occurrence of OCR, but did not find any statistically significant difference between their effects.

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## References

1. Ghajarzadeh M, Adili-Aghdam F. [Learning styles of medical residents of different disciplines in Tehran University of Medical Sciences]. *Razi Journal of Medical Sciences* 2012;19(94):27-32.
2. Bitran M, Zúñiga D, Pedrals N, Padilla O, Mena B. Medical students' change in learning styles during the course of the undergraduate program: from 'thinking and watching' to 'thinking and doing'. *Canadian Medical Education Journal* 2012;3(2):e86-97.
3. OstadiMoghddam H, Fotouhi A, Khabazkhoob M, Heraveian J, Yekta AA. Prevalence and risk factors of refractive errors among schoolchildren in Mashhad, 2006-2007. *Iranian Journal of Ophthalmology* 2008;20(3):3-9.
4. Laatikainen L, Erkkilä H. Refractive errors and other ocular findings in school children. *Acta Ophthalmol (Copenh)* 1980;58(1):129-36.
5. Siatkowski RM, Flynn JT, Hodges AV, Balkany TJ. Ophthalmologic abnormalities in the pediatric cochlear implant population. *Am J Ophthalmol* 1994;118(1):70-6.
6. Regenbogen L, Godel V. Ocular deficiencies in deaf children. *J Pediatr Ophthalmol Strabismus* 1985;22(6):231-3.
7. Young AL, Tam PM, Leung GY, Cheng LL, Lam PT, Lam DS. Prospective study on the safety and efficacy of combined conjunctival rotational autograft with intraoperative 0.02% mitomycin C in primary pterygium excision. *Cornea* 2009;28(2):166-9.
8. Moran DJ, Hollows FC. Pterygium and ultraviolet radiation: a positive correlation. *Br J Ophthalmol* 1984;68(5):343-6.
9. Lavrich JB. Convergence insufficiency and its current treatment. *Curr Opin Ophthalmol* 2010;21(5):356-60.
10. Klein R, Klein BE, Linton KL. Prevalence of age-related maculopathy. The Beaver Dam Eye Study. *Ophthalmology* 1992;99(6):933-43.
11. Spanish Eyes Epidemiological (SEE) Study Group. Prevalence of age-related macular degeneration in Spain. *Br J Ophthalmol* 2011;95(7):931-6.