EDITORIAL

Where are we in laser corneal refractive surgery

Dónde estamos en cirugía refractiva corneal con láser

José L. Güell a, b, *

a Director of Cornea and Refractive Surgery Unit, Instituto Microcirugía Ocular, Barcelona, Spain
b Cornea and Refractive Surgery Unit, Autonoma University of Barcelona, Barcelona, Spain

Since the revolutionary incorporation of the excimer laser in corneal refractive surgery back in 1980s,1 the understanding of both corneal biomechanics and the qualitative and quantitative evaluation of the eye as an optical system, have become and obsession for both ophthalmologists and optometrists as well as for other related scientists. In fact, the closed interaction between these groups of professionals turned out for the first time in modern medicine, a daily clinical standard since then.

Initially photorefractive keratectomy (PRK) and soon after, mostly, laser assisted in situ keratomileusis (LASIK), the "precise" heir of lamellar refractive techniques, were considered as techniques able to correct any degree of ametropia. Quality of vision deterioration on the higher corrections, industry driven quality and design improvements in intraocular materials and the description of secondary ectasia2 allowed, at that time, refractive surgeons to reconsider the use of phakic intraocular lenses (p-IOL’s), in fact one of the earliest ever used refractive procedures, abandoned because of the initial frequency and severity of associated complications.3, 4

Along the first decade of the 21st century we had the opportunity to observe significant improvements in the field of refractive surgery: better excimer ablation pro-
the importance of such an interprofessional relationship I pointed out in the beginning of this editorial and we must stress our young colleagues to understand its need and to continue and perhaps, to strength it. Some of the articles of this issue highlights such a compromise, reporting the results of investigations of interest for both ophthalmologists and optometrists for achieving a better understanding of the effects of different refractive surgery techniques, such as photorefractive keratectomy (PRK), wavefront-guided laser refractive surgery, or corneal collagen cross-linking (CXL).

References