1. Aims and Scope

The International Journal of Keratoconus and Ectatic Corneal Diseases is a peer-reviewed journal covering keratoconus and other ectatic corneal diseases, including pellucid marginal degeneration, Terrien’s marginal degeneration, keratoglobus and iatrogenic keratoconus, such as post-Lasik ectasia. Studies dealing with epidemiology, genetics, pathology and corneal biomechanics are welcomed.

The journal covers new diagnostic tools that aid in the diagnosis of keratoconus and ectatic corneal diseases including their role in refractive surgery.

The journal deals with new treatment modalities, such as collagen corneal cross-linking, intrastromal corneal rings, anterior lamellar keratoplasty, deep anterior lamellar keratoplasty and the applications of femtosecond lasers in penetrating keratoplasty and corneal surgery. In addition the journal covers the use of excimer laser in corneal surgery. Special interest is drawn to contact lenses and their use in keratoconus and ectatic corneal diseases.

The above mentioned topics have a crucial role in the clinical practice and day-to-day management.

The journal aims to publish articles arising out of original research, specialized topics, review articles, editorials and descriptions of new diagnostic and therapeutic techniques and technologies. In addition, the journal includes pictorial reviews, letters to the editor, book reviews, and notices of meetings and courses. In this way the journal hopes to provide a forum for the stimulation of new developments, clinical practices, and research in its field.

2. Ethical Considerations

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Protection of Human Subjects and Animals in Research
When conducting experiments on human subjects, appropriate approval must have been obtained by the relevant ethics committees. All the procedures must be performed in accordance with the ethical standards of the responsible ethics committee both (institutional and national) on human experimentation and the Helsinki Declaration of 1964 (as revised in 2008). When reporting experiments on animals, authors must follow the institutional and national guidelines for the care and use of laboratory animals.

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**Introduction**

**Why We need a New Journal that focuses on Keratoconus and Ectatic Corneal Diseases?**

This is a great honor to introduce the inaugural issue of the *International Journal of Keratoconus and Ectatic Corneal Diseases*. While some may question the need for a separate journal related to such conditions, it is important to emphasize some important facts. While keratoconus and related ectatic diseases of the cornea have been recognized for over 150 years, the past decades have witnessed an explosive growth in the understanding of the pathophysiology, diagnosis and treatment of such diseases.

About 15 years ago, surgery was indicated exclusively to improve vision when glasses and contact lenses failed. Penetrating keratoplasty (PKP) was considered as the primary and most successful surgical option. In the last two decades, ophthalmology has witnessed a dramatic increase in both the medical and surgical management of ectatic disease, including better contact lens fitting and move away from full-thickness corneal replacement. Deep anterior lamellar keratoplasty (DALK) techniques have demonstrated similar visual outcomes as PKP, with the important advantage of retaining the host endothelial cells. The more recent trend is to avoid keratoplasty with alternative techniques, such as the implantation of intracorneal ring segments (ICRS) to regularize corneal shape or to stabilize the cornea and hopefully prevent progression of disease and subsequent visual loss with collagen cross-linking. Refractive procedures, such as phakic intraocular lenses and customized surface ablation have gained popularity in the management of keratoconus. Some investigators have combined multiple modalities, such as customized ablation and cross-linking or ICRS and cross-linking. Femtosecond laser technology, which has revolutionized corneal surgery, has been used for different procedures, such as ICRS, cross-linking, lamellar and penetrating keratoplasty.

There was also a tremendous evolution on the diagnosis of keratoconus. Corneal topography introduced the capability to diagnose the disease prior to the development of gross biomicroscopic signs or loss of significant best spectacle-corrected vision. Tomography, recognized as the 3D characterization of corneal shape, further demonstrated an enhanced sensitivity for diagnosing the earliest forms of disease, which is critical to prevent keratectasia after refractive-elective procedures, such as LASIK. The ability for clinical biomechanical assessment also gained momentum for the diagnosis of keratoconus and currently represents an area of active research. Wavefront analysis has been used for keratoconus diagnosis and also to guide therapeutics, such as the prescription of glasses or even to enable customized soft contact lenses.

New knowledge and diagnostic information has allowed us to reexamine our classification of keratoconus and related ectatic conditions. The pattern of thinning assessed by tomography can be used as a criteria to distinguish between keratoconus and pellucid marginal degeneration.

Corneal ectasia represents an active area for research and development in ophthalmology. The growth in diagnostic ability and therapeutic modalities has been dramatic. Considering the advent of more accurate diagnostic techniques and the ability to halt the progression of the disease, every ophthalmologist should be alert for screening for such conditions when evaluating young patients. As in glaucoma or diabetes, early diagnosis and management should prevent vision loss. Such facts associated with the relatively high incidence of the disease in the population has made a trend for the advent of ‘ectasia-specialists’ among corneal surgeons. The need for a specialized journal to address this field is unquestionable.

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