BioMed Research International

Special Issue on

Latest Treatment Option and Technology Advancement in Corneal and Ocular Surface Disease

Call for Papers

The eponymous "Corneal ectasia" involves disorders in which structural changes within the cornea cause an alteration of its normal gradient curvature and of its biomechanical behavior. Screening, prevention, and treatment of this disorder can interest all patients eligible for refractive surgery and patients with keratoconus, pellucid marginal degeneration, and keratoglobus. Appropriate management is essential to promote visual rehabilitation and to reduce the need for corneal graft. Although topographical approaches are able to provide an early diagnosis of corneal ectasia, the study of corneal biomechanical changes and the introduction of new equipments over the past few years are changing the approach, hypothesizing that biomechanical destabilization of the cornea may precede topographic evidence. We are particularly interested in manuscripts that report the relevance of new tools for detection of risk factors and early diagnosis of corneal ectasia, looking to the biomechanical behavior of the cornea and the future research directions for the treatment of corneal ectasic disorder. Potential topics include, but are not limited to:

- Management of ectasic disorders in adult and pediatric age
- Management of peripheral ectasic disorder
- Management of corneal ectasic disorder in thin cornea
- Risk factor and prognosis for corneal ectasia after refractive surgery
- Genetic tools for screening ectasic disorders
- Collagen orientation and distribution in ectasic disorders
- Numerical models of the cornea
- Thermodynamic aspect of the cornea during cross-linking
- Mechanical behavior of the ectasic cornea
- New equipment under development: iontoforesis, accelerated cross-linking
- New compound under development: Hypoosmolar riboflavin, polyvinyl pyrrolidone
- Corneal cross-linking protocols
- Patient selection for cross-linking or intrastromal corneal ring treatment
- Combined corneal collagen cross-linking and refractive surgery
- Cross-linking/Intrastromal corneal ring segment and morphological change at confocal microscopy
- Cross-linking/Intrastromal corneal ring segment and corneal biomechanical change
- Cross-linking/Intrastromal corneal ring segment and inflammation
- Corneal biomechanical proprieties in dynamic conditions in corneal ectasic disorders

Before submission authors should carefully read over the journal's Author Guidelines, which are located at http://www.hindawi.com/journals/bmri/guidelines/. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at http://mts.hindawi.com/submit/journals/bmri/ophthalmology/cornid/ according to the following timetable:

Manuscript Due	Friday, 23 May 2014
First Round of Reviews	Friday, 15 August 2014
Publication Date	Friday, 10 October 2014

Lead Guest Editor

Ciro Costagliola, Department of Medicine and Health Sciences, University of Molise, Campobasso, Italy; ciro.costagliola@unimol.it

Guest Editors

Mark Batterbury, Ophthalmology Department, St. Paul's Eye Unit, Royal Liverpool University Hospital, Liverpool L7 8xP, UK; mark.batterbury@rlbuht.nhs.uk

Harminder S. Dua, Division of Opthalmology and Visual Sciences, School of Clinical Sciences, University of Nottingham, UK; harminder.dua@nottingham.ac.uk

Leonardo Mastropasqua, Eye Clinic, University "G. D'Annunzio" Chieti-Pescara, Chieti, Italy; mastropa@unich.it