

1. Record Nr.	UNINA9910157475503321
Titolo	Keratoconus : Recent Advances in Diagnosis and Treatment // edited by Jorge L. Alió
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-43881-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIX, 371 p. 171 illus., 154 illus. in color.)
Collana	Essentials in Ophthalmology, , 1612-3212
Disciplina	617.719
Soggetti	Ophthalmology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Part 1: Introduction -- 1 What is Keratoconus? A New Approach to a Not So Rare Disease -- 2 Modern Pathogenesis of Keratoconus: Genomics and Proteomics -- 3 Epidemiology of Keratoconus -- 4 Histopathology (From Keratoconus Pathology to Pathogenesis) -- 5 Keratoconus in Children -- Part 2: Diagnostic Tools in Keratoconus -- 6 Instrumentation for Diagnosis of Keratoconus -- 7 Analyzing Tomographic Corneal Elevation for Detecting Ectasia -- 8 Analyzing Tomographic Thickness for Detecting Corneal Ectatic Diseases -- 9 New Diagnostic Approach of Corneal Topography Maps -- 10 Geometrical Analysis of Corneal Topography -- 11 Early Keratoconus Detection Enhanced by Modern Diagnostic Technology -- 12 Role of Corneal Biomechanics in the Diagnosis and Management of Keratoconus -- 13 Diagnosing Keratoconus Using VHF Digital Ultrasound Epithelial Thickness Profiles -- 14 Brillouin Scanning Microscopy in Keratoconus -- Part 3: The Clinical Profile of Keratoconus -- 15 Keratoconus Grading and Its Therapeutic Implications -- Part 4: Therapeutic Tools in Keratoconus -- 16 Contact Lenses for Keratoconus -- 17 Intracorneal Ring Segments: Types, Indications and Outcomes -- 18 Intracorneal Ring Segments: Complications -- 19 Corneal Collagen Cross-Linking for Corneal Ectasias -- 20 Complications of Corneal Collagen Cross-Linking -- 21 Pediatric Corneal Cross-Linking -- 22 Carbon Nanomaterials: An

Upcoming Therapy for Corneal Biomechanic Enhancement -- Part 5.
Surgery of Keratoconus -- 23 Surgical Correction of Keratoconus:
Different Modalities of Keratoplasty and Their Clinical Outcomes -- 24
The Use of Femtosecond Laser and Corneal Welding in the Surgery of
Keratoconus -- Part 6. Refractive Surgery in Keratoconus -- 25
Refractive Surgery in Keratoconus -- 26 Excimer Laser Ablation in
Keratoconus Treatment: Sequential High Definition-Guided PRK after
CXL -- 27 Iris-Supported Phakic IOLs Implantation in Patients with
Keratoconus -- 28 Toric Implantable Collamer Lens for Correction of
Myopia and Astigmatism in Keratoconus -- 29 Cataract Surgery in the
Patient with Keratoconus -- 30 Adjourn: A Glance at the Future of
Keratoconus.

Sommario/riassunto

As a degenerative disorder of the eye, keratoconus can cause substantial distortion of vision, with multiple images, streaking, and sensitivity to light all reported by patients. Keratoconus: Recent Advances in Diagnosis and Treatment updates ophthalmologists about the innovations that have occurred within the last decade, discussing the diagnostic imaging techniques that have been developed for keratoconus diagnosis, understanding of how examination techniques are related to the evolution of keratoconus, and how to indicate the different therapeutic tools that have been created for keratoconus over the last several years. Additionally, fundamentals for new diagnostic elements, based on the mathematical, physical and biomechanical data are analyzed in depth for a better understanding of the essential diagnostic steps for the clinician to guide patients towards the most adequate therapeutic tool in the case. Modern keratoplasty techniques, assisted by femtosecond lasers or other devices, are also covered and these techniques, along with the emerging conservative treatments, have added to more precise control of the evolution of the disease.
