
Corneal Transplantation

Jesper Hjortdal
Editor

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 Springer

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Preface

Corneal transplantation has been performed for more than 100 years. Until 15 years ago the state-of-the art type of transplantation was penetrating keratoplasty, but since the start of this millennium, newly designed surgical techniques have developed considerably. Today, the vast majority of keratoplasty procedures are performed as delicate lamellar procedures either assisted with fine microkeratomes or femtosecond lasers or using skilled surgical dissection procedures.

These advancements have helped patients undergoing keratoplasty to have a much faster visual recovery and a more stable eye with less risk of rejection episodes.

Besides covering updated chapters on penetrating keratoplasty, and anterior and posterior lamellar procedures, this textbook also gives a thorough overview of the history of corneal transplantation and a detailed presentation of the microstructural components of the cornea essential to keratoplasty procedures. Corneal banking has changed over recent years as graft preparation for anterior and posterior lamellar keratoplasty now often is performed within the bank. Chapters have been devoted to description of graft registries, which are an indispensable source of information of daily practices and outcomes, and to economical evaluations of keratoplasty procedures. The optical consequences of a keratoplasty procedure, especially in relation to simultaneous or later cataract surgery, are discussed in addition to current methods for reducing post-keratoplasty astigmatism. Economic considerations on cost and benefit of medical treatment and surgical procedures are today an integrated part of the health system in many countries, and a chapter covers these aspects of corneal transplantation.

This textbook is aimed at presenting an updated review of the new techniques and to assist fellows and corneal surgeons in their advice and selection of patients for the best surgical procedure considering benefits and risks.

Aarhus, Denmark

Jesper Hjortdal

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