

Foreword

Contact lenses are currently used electively by 80 to 100 million patients worldwide to correct refractive errors of vision. With so many patients at increasing risk for device-related ocular complications, Dr. Roth's excellent treatise, *Contact Lens Complications*, is a timely and important work. Long familiar and available to European readers in German, the current translation and publication of an English edition is a most welcome development for all practitioners and academics who practice both the scientific and clinical art of contactology throughout the world. The timing of publication of this superb monograph is particularly fortunate because it coincides with the introduction into clinical practice of a new generation of contact lenses: hyper oxygen-transmissible contact lenses recently approved for up to 30-night extended wear by the Food and Drug Administration, USA. Thus, it is more important than ever for con-

tactology practitioners to be familiar with contact-lens-induced eye problems.

Outstanding features of the text are brevity without sacrificing comprehensiveness or clarity, and excellent color photographs. These features will ensure instant popularity of the English edition among both a generation of optometric students and ophthalmology residents. Indeed, it appears that an old classic has been reborn for the world community at large.

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Preface

Contact lenses are unquestionably a useful aid in the treatment of refractive problems and of many diseases of the eye. They can be used to compensate for optical errors or as an ocular bandage, protective covering, or drug delivery system. They improve the wearer's appearance and expand the field of vision; they perform the function of a destroyed cornea or cover an iris that has been damaged by trauma or disease. They facilitate many sporting activities and indeed open certain professions to persons with impaired vision who would not otherwise be able to pursue them.

Yet contact lenses also have disadvantages. They exert chronic pressure on the anterior surface of the eye, disturb the convection of tears, and impair immune responses in the eye through chronic foreign-body irritation, thus potentially causing complications in the anterior ocular segment. Finally, contact lenses can mask certain types of primary ocular illness, which, in the setting of contact lens wear, may be difficult to diagnose.

Like any effective medical treatment, contact lenses have not only a therapeutic effect, but also undesirable side effects. A wide variety of contact lens complications have been reported in recent years, most of which require treatment by an ophthalmologist. Contact lens complications are sometimes easily mistaken for other ocular diseases, and vice versa; the diagnostic evaluation of contact lens complications thus requires considerable expertise on the ophthalmologist's part.

A cursory glance at this book reveals that the ocular complications of contact lenses are numerous and varied, and may create the impression that the risk of wearing them is incalculably high. Yet this is certainly not the case. The multiplicity of complications in no way diminishes the therapeutic value of contact lenses, as the actual frequency of complications, according to many well-performed, international, longitudinal studies, is well below 1%—a rate that is hardly matched by many other forms of routine treatment in ophthalmology. Safety is assured by proper lens care and handling on the part of the patient, and by frequent and

thorough follow-up examinations on the part of the ophthalmologist.

This book is meant to be useful to everyone involved in contactology, including resident physicians and ophthalmologists who have just started fitting contact lenses. We have avoided extensive discussions of basic science that can be found in other texts and have tried to use terminology that will be transparent even to persons with little experience in contactology. Examining techniques and findings are presented in such a way that they could be duplicated by any ophthalmologist, whether in an academic institution or in private practice.

In writing this book, the author has had to face certain inevitable difficulties. This is the first comprehensive publication in ophthalmology addressing the more important complications of contact lenses, and the causes and interrelationships of many of the findings discussed here are still imperfectly understood. Furthermore, contact lenses have not been in use long enough to allow a complete assessment of their long-term complications. This will have to await future publications by other investigators.

This book is the fruit of more than 25 years of research and teaching in applied contact optics in the University Ophthalmology Department and Army Hospital in Ulm, Germany, at the Institute for Contact Optics in Ulm, and at the Center for Sight, Georgetown University Medical Center, Washington, DC.

I would like to thank my teachers in contactology, Drs R Marquardt in Ulm, W Erich in Homburg/Saar, the late H Kemmetmueller in Vienna, the late P Halberg in New York, M Lemp and D MacKeen in Washington, and the late Jonathan Kersley in London. I would also like to thank the numerous others who taught me through their published works, and, finally, the staff of Georg Thieme Verlag for their invaluable assistance in producing this book.

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Hans-Walter Roth