

Foreword

Forty years ago, when one opened an ophthalmology textbook at the section on conjunctival disorders, one was struck by the importance given to acute catarrhal conditions—and their complex nomenclature. At the same time, the possibility of treating these conditions with antibiotics, and thereby reducing their consequences, was a clear source of satisfaction. In contrast, chronic disorders were only mentioned in passing. This was not because allergic conjunctivitis, rosacea, fibrosing conjunctivitis, etc. were unknown, or that a precise nomenclature for the numerous clinical presentations had not been developed. Rather, it was because these chronic disorders involved inflammatory processes whose main effectors were unknown, or, when known, their beneficial or detrimental effects within the different conjunctival structures could not be individualized.

What has most changed our outlook in recent years is the extraordinary progress accomplished in our capacity to explore the molecular mechanisms underlying the plethora of biological events that can occur or persist in the different organs. Anatomy is now analyzed at the Angström scale. Coupled with biochemistry, immunology, and molecular biology, this has allowed us to define the nature and location of cellular components, basement membranes, extracellular matrices, and so forth. Immunocompetent cells have been identified, classified, and linked to their various protective or destructive effects. The cytokines these cells release in a tightly regulated fashion

have been characterized, together with their specific antagonistic or agonistic actions. A grandiose, intricate picture has emerged, and researchers are now starting to unravel certain cycles and pathways shared by more than one disorder. The conjunctiva, once considered simply as “a mucosal sheath comparable to the synovium of a joint,” has now been characterized at the level of its cellular organelles, multiple basement membranes, and cellular attachments. The apparent disorder revealed by early histological studies has given way to a refined knowledge of cellular and extracellular mediators and their likely roles. We can now put forward refined pathogenic mechanisms and outline the means of counteracting them. Treatments are becoming more specific and more effective, even though further progress is eagerly awaited, especially regarding adverse effects. In turn, therapeutic successes based on specific actions are confirming pathogenic hypotheses.

The authors are to be congratulated for the way in which they have presented their subject. The detailed recall of fundamental anatomy and immunological principles, accompanied by very clear diagrams, lays the foundations for a clear understanding of the mechanisms underlying the various diseases and disorders dealt with in subsequent chapters. The reader will find invaluable information on the management of inflammatory conditions of the conjunctiva.

Professor Yves Pouliquen

Preface

The conjunctiva, the eye's mechanical and immunological "sentry tissue," is the site of highly varied inflammatory conditions, of both a chronic and acute nature. For this reason alone it fully warrants an entire book. As all types of immune reaction can occur in the conjunctiva, the first chapter recalls the anatomical, physiological, immunological, and functional bases required to understand the different inflammatory situations. Each chapter examines the main relevant disorders, but the authors are fully aware that the list is far from exhaustive. The bulk of the book is devoted to chronic conjunctivitis because its differential diagnosis and treatment are often more problematical.

Immunology—like molecular and cellular biology, to which it is intricately related—is constantly and rapidly evolving, and important new data are being published weekly. This is why the contributors have a certain feeling of frustration on delivering their final drafts for publication. Indeed, they are fully aware that, more than in any other scientific field, today's

immunological truths may tomorrow appear simplistic—or simply wrong. They therefore request their readers' indulgence: this book should be seen as a "snapshot" of current knowledge and hypotheses, although we hope it will remain a reliable source of fundamental information and practical solutions for years to come.

As coordinator and editor, I wish to dedicate this work to Professor Yves Pouliquen of Hotel-Dieu Hospital in Paris, and to Professor Stephen Foster of Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, who encouraged me to specialize in inflammatory conditions of the eye.

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Professor Thanh Hoang-Xuan