# Intraocular Inflammation

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#### **Foreword**

My five colleagues who have collaborated to bring this book to life have done a magnificent job in creating a wonderful resource for not only ophthalmologists but also for others wishing to learn about uveitis. They have brought their expertise and organizational talents from their five different countries and have assembled experts from around the world to create this treatise about all aspects of uveitis, its differential diagnosis, pursuit of the specific diagnosis, and treatment of each of the causes of uveitis.

The book contains most up-to-date information on each of these things. It is rich in illustration and case examples and must be a part of every ophthalmologist's library. I congratulate them in the most sincere and high manner.

C. Stephen Foster

#### **Preface**

Various uveitis experts have had the idea of writing a textbook about their specialty, and wonderful books have been published in the past. We have all learned many lessons from them, and over the years we all have been able to add our own experience to this published knowledge.

Some years ago, all the Editors of this book came to the decision that we wanted to bring our collective knowledge into a new book. We all knew how large the field of intraocular inflammation had become, with important developments on diagnostics, understanding of immunological mechanisms, and treatment options apart from the characterization of new entities. With that in mind we decided to invite uveitis experts in each area for this ambitious task of creating a book encompassing all these new elements, and in doing this we felt, we would most certainly provide a most up-to-date textbook including not only a summary of the published information, but even better, a summarized and optimized view from experts in the field.

After years of work we now can introduce to you this book, which tries to present the subject of intraocular inflammation in an encyclopedic style. The first part of the book covers important general aspects, including the relevant anatomy, classification of uveitis, epidemiology (which now shows the real impact of these disorders), and how to evaluate uveitis patients. But here you will also find new important chapters, such as genetics, uveitis, and evidence-based medicine, and a chapter focusing on the problems of uveitis in clinical trials. We felt that a comprehensive chapter about the immunology of uveitis was essential for a proper understanding of the mechanisms of intraocular inflammation and for a better approach regarding the development of new therapies in the future.

The second part is dedicated to the diagnostic methods which now allow us a more precise assessment of each condition, and which are important for the correct diagnosis and monitoring of response to therapy.

The third part of this textbook has the objective of informing the reader about the new anti-inflammatory drugs which are available, and also discusses some agents, currently under investigation, which will hopefully be available in the near future, adding more options to therapeutic armamentarium.

All chapters follow the same structure. All major studies are summarized in tables for ease of comparison.

The next major part deals with complications, always challenging, but which we have learned to recognize and manage. Understanding potential

viii Preface

complications and knowing how to prevent them and how to manage them are important elements in improving outcomes for our patients.

As a way of illustrating the best method of using the next two parts of this book, we provide two potential scenarios. In the first, the patient presents with intermediate uveitis of unknown etiology; in the second, the patient is known to suffer from sarcoidosis, diagnosed by clinicians, and now presents with uveitis. For the first situation, the challenge is to find any underlying disorder which may explain the intermediate uveitis, and for this assessment ocular and systemic findings will be necessary. Tables filled with differential diagnostic information will help to find a likely potential underlying disorder. We expect that the chapter "Intermediate Uveitis" will allow the reader to immediately establish a list of potential differential diagnosis, and then proceed with the necessary tests for a final, conclusive diagnosis.

For the second situation, a solid knowledge of the ocular manifestations of associated disorders will permit the conclusion if the presenting clinical findings are compatible with this diagnosis or not. A large portion of the book (102 chapters) has been dedicated to specific etiologies, with full description of the ocular manifestations including typical and atypical features. A good example is the chapter on "Sarcoidosis" that describes in detail the general and ocular findings of this well-defined disorder, and which will address the second situation mentioned above. Here the reader may find information about the clinical signs of sarcoidosis-induced ocular inflammation and especially about the types of uveitis which may be associated with sarcoidosis. This also includes diagnostic and therapeutic aspects. These chapters will cover nearly all described entities involved in intraocular inflammation. All chapters will follow the same subheadings, allowing the reader to compare the information between disorders.

One of the most challenging characteristics of inflammatory disorders is the understanding of progressive changes induced by the disease process leading to morphologic changes. The objective clinical findings may also correlate with the subjective findings. Correct interpretation of such situations reflects the competence of the uveitis specialists. The weakest point of most textbooks, especially dealing with intraocular inflammation, is the limited amount of clinical illustrations which does not allow the presentation of the full spectrum of the disease process, from early signs to late stage disease, and reactivation of quiescent uveitis. Most often, there is space for just one or two "typical" illustrations. To show the dynamics of intraocular inflammation, we decided to add 100 case reports to the textbook. At the end of most of the chapters, a web address allows access to at least one typical case report, but sometimes we also were able to add atypical, more challenging cases.

We hope that using this book the reader will be able to achieve a better understanding of the many facets of ocular inflammation, especially to be able to correctly identify the main site of the inflammatory process and with that create a list of the conditions most likely associated with it and learn how to evaluate the ocular and systemic signs which may give important clues to the diagnosis. The proper selection of investigations in supporting the diagnosis and learning how to interpret them is also part of what we expect will be learnt, ultimately leading to the correct choice of therapy. The nonspecial-

Preface ix

ists tend to avoid managing uveitis patients because they believe the diagnosis and treatment of uveitis is "too complicated." This book provides approaches for them also to properly assess and manage most of the patients with uveitis and related intraocular inflammations. Some will still remain a challenge, even for the specialist, but without challenges, this book would never have been written.

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### **Acknowledgements**

This book is dedicated to:

All young doctors: in the hope that this book will ignite their enthusiasm in the field of ocular inflammation

All uveitis patients: who have taught so much and have allowed us to study and better understand their diseases

All our teachers: for getting us started and planting the seed of scientific curiosity in our minds

All our colleagues: for sharing their personal experience with us and making this book possible

Our family and friends: for their understanding and continuous support

-The Editors

#### **Contents**

#### Part I General Aspects of Uveitis

1	Andrea Leonardi, Daniel Vítor Vasconcelos-Santos, José Carlos Nogueira, and Paul G. McMenamin	3
2	Classification and Terminology	31
3	Immunology of Uveitis	39
4	<b>Epidemiology</b>	83
5	Evaluation	93
6	Genetics	115
7	Uveitis and Clinical Trials	123
8	<b>Evidence-Based Medicine</b>	137
Par	rt II Diagnostics	
9	<b>Serology, Anterior Chamber and Vitreous Diagnostics</b> Jolanda D.F. de Groot-Mijnes, Aniki Rothova, and Aize Kijlstra	149

xiv Contents

10	Fluorescein and Indocyanine Angiography	159
11	Optical Coherence Tomography  Cristina Muccioli, André C. Romano, Juliana Lambert Oréfice, Fernando Oréfice, Rogério Alves Costa, Daniela Calucci, Ruy Cunha Filho, Claudio R. Garcia, Tiago E.F. Arantes, and Rubens Belfort Jr.	181
12	Electrodiagnostic Tests	199
13	Ultrasonography	207
14	Ocular Biopsy, Diagnostic Vitrectomy	217
15	Laser Flare Photometry	227
16	<b>Diagnostic Imaging Procedures</b>	237
17	New Imaging Techniques  Juliana Lambert Oréfice, Fernando Oréfice, Rogério Alves Costa, Daniela Calucci, and Ruy Cunha Filho	251
Par	t III Therapy	
18	General Considerations	267
19	Corticosteroids	273
20	Non-steroidal Anti-inflammatory Drugs	285
21	TNF-Alpha Blocking Agents	293
22	Azathioprine	309
23	Chlorambucil	315
24	Cyclophosphamide	323
25	Cyclosporin A	331