

**Common Neuro-Ophthalmic Pitfalls** 



# Common Neuro-Ophthalmic Pitfalls

Case-Based Teaching

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#### **Foreword**

If you have already bought this book, you made the right choice. If you are just browsing through it and trying to decide whether to buy it, you must be tempted. Go ahead – you will not be disappointed.

This is the work of two gifted clinicians. With deep credentials in academic neuro-ophthalmology and frequent performances on the lecture circuit, they are highly respected in their field. What makes them especially distinctive is that they not only understand neuro-ophthalmic disease, they catch its finest nuances and they know how to share them – and teach them.

If you think you need a straight-up textbook to learn this material, think again. Reading a textbook might be like using a guidebook to go through an art museum. Reading this book is like having a personal guide who is both erudite and passionate. It is much more fun.

The subject matter is all cases – real cases that the authors have grappled with. Each illustrates a critical problem in neuro-ophthalmic diagnosis or management. Because we learn best when we make mistakes, the authors have selected cases in which someone stumbled.

The cases are presented as mystery stories. Whether you are a neuro-ophthalmic novice or a sophisticate, an ophthalmologist or a neurologist, a physician in training or a physician in practice, you will enjoy matching your wits against these gurus!

Jonathan D. Trobe, MD University of Michigan

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#### **Preface**

This book is a case-based teaching tool, meant to bridge the gap between textbook information and the everyday experience of the clinician "in the trenches". Our intended audience includes medical students, residents and practitioners in the fields of neurology, ophthalmology, neurosurgery and neuroradiology as well as our colleagues specializing in neuro-ophthalmology.

The level of information provided in these case discussions assumes that the reader has some degree of familiarity with basic anatomic pathways and with the pathophysiology of common neuro-ophthalmic disorders. There are a number of excellent textbooks that cover this kind of information and the reader is directed to these sources for review and expansion of this information as needed. The case discussions do include a brief review of key points regarding neuroanatomy and physiology when relevant, highlighting those with direct clinical correlation.

The choice of cases is to some extent arbitrary. The book is not meant to be inclusive but rather to illustrate diagnostic principles, trying to focus on those that are a frequent source of confusion or discomfort, especially to the non-ophthalmologist. In each case we try to highlight the specific aspect of the clinical presentation that points to the correct diagnosis, furnished as the "tip" at the end of the case discussion.

Because the text is not organized anatomically or by disease process, certain disorders appear in more than one location. This occurs because of the diverse clinical manifestations of certain

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conditions. For example, the features of an Adie's pupil when acute (unilateral dilated pupil) are distinct from those when the disorder is chronic (bilateral small poorly reactive pupils). Similarly, the clinical presentations of Leber's hereditary optic neuropathy and dominant optic atrophy are quite different even though both are forms of hereditary optic nerve disease. These different sections are meant to be complementary. Care has been taken to avoid redundancy or repetition and in each case the reader is directed to the location of the additional information. Each case can stand alone as a complete story, however, and so the book can be read in any order. We hope this format is user-friendly

and would like to think that our readers will find the book "a fun read".

Although a variety of disorders and different kinds of "pitfalls" are covered, there is a clear recurring theme in these cases, namely the importance of information derived from the history and the physical examination in the diagnosis of neuro-ophthalmic disease. Advances in modern neuro-imaging sometimes create the impression that such "old-fashioned" clinical skills are no longer necessary, that they are an anachronism. These cases illustrate the way in which such clinical skill complements and informs the data that we obtain from ancillary testing.



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