

Ulrich Schiefer
Helmut Wilhelm
William Hart
Editors

Clinical Neuro- Ophthalmology



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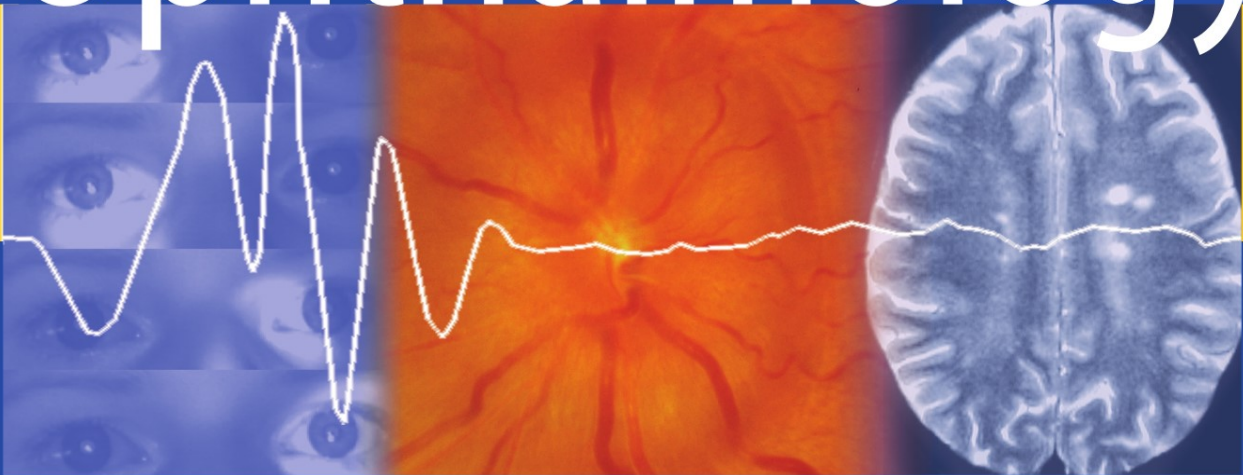
A Practical Guide

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Foreword by William F. Hoyt
Translation by William Hart

With 184 Figures in 357 parts,
75 Tables, 5 Posters and DVD

 Springer

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Dedication

*We gratefully dedicate this work to our
(neuro-) ophthalmic role models and mentors:*

*Elfriede Auhorn,
Heinrich Harms,
Bernard Becker,
and
Ronald M Burde*

And to our lives' companions Monika, Barbara, and Mary



Foreword

This English version of the 2003 primer *Praktische Neuroophthalmologie* should be welcomed worldwide by students of ophthalmology. It is beautifully illustrated in color, clearly written, and, best of all, supplemented with an interactive DVD with video clips.

The text is loaded with “Pearls,” specifically marked for the reader’s attention.

Several modest-sized books published in the past 10 years have attempted to cover the complicated subject of neuro-ophthalmology in a manageably brief format. This German effort joins the competition, with the distinct advantage of a DVD.

Professors Schiefer, Wilhelm, and Hart, along with 23 coauthors, have my congratulations and admiration for a thoughtful, handsome job well done.

William F. Hoyt, MD, Professor Emeritus
University of California, San Francisco

Preface

Yet another textbook of clinical neuro-ophthalmology?

This text and its digital supplement are meant to be used by comprehensive ophthalmologists and residents in training, and are not meant to be used as one would the larger, almost encyclopedic, reference texts with their detailed citations and case reports. Resident physicians should find the format of this text particularly helpful as a learning tool, including the interactive, digital (DVD) supplement. The material is sufficiently complete as to allow a global perspective of the material, and yet it remains sufficiently brief that the entire volume can be consumed in a few weeks, rather than in months or years. The use of colored illustrations should be particularly valuable for those being introduced to the broad spectrum of clinical findings, especially those that portray the varied appearances of the optic disc and retina. Video clips also provide a compelling demonstration of the subtle elements of ocular and pupillary movements.

Acknowledgements

The editors are particularly grateful for the efforts of the authors, who were tasked with the goal of covering each of their subjects from a global perspective while keeping the chapters as brief as reasonably possible. The authors, in turn, wish to express their gratitude for the tireless efforts of the editorial staff at Springer Verlag, above all, the contributions of Marion Philipp and Martina Himberger, as well as Judith Diemer from LE-TeX. The editors also gratefully acknowledge the generous permission granted by Dr. Reinhard Kaden for the use of an English-language translation taken from the original German text *Praktische Neuroophthalmologie*, U. Schiefer, H Wilhelm, E. Zrenner, and A. Burk (eds) (2003) Kaden Verlag, Heidelberg, Germany.

The authors and editors are also indebted to Regine Gattung-Petith, Albert R. Gattung, Alexander Lorenz, Maja Grigoleit, Regina Hofer, and Jan Schiller for their support, advice, and production of numerous figures, graphic elements, and video animations. Maja Grigoleit is specifically acknowledged for her design of the graphic elements used in the interactive case management vignettes. Heartfelt gratitude is also expressed for the contributions and support of those at Pharm-Allergan, Ettlingen, and especially of Dr. Friedemann Kimmich, whose generous support allowed preparation of the interactive version. Dr. Simon Wiest is especially acknowledged for his advice and assistance during preparation of the interactive DVD companion to the text.

The editors and authors thank the many patients for their patience and cooperation during collection of the case material, and for allowing their neuro-ophthalmological disorders to be recorded in written, graphic, and video formats. The translator is indebted to the many authors for gracious consent in allowing the translated version to avoid the use of literal interpretations in favor of explanatory clarity. Finally, the editors are truly indebted to their families, above all their wives, Monika, Barbara, and Mary, for their unflagging support and encouragement over the past 3 years.

Readers who use this work are encouraged to give us feedback regarding missing, ambiguous, erroneous, and/or confusing elements, allowing us to further improve the work during production of subsequent editions. We hope that readers will enjoy some of the unique features to be found in both the written and interactive portions of the work, and that our ophthalmic colleagues will find this material helpful for both the learning and the teaching of the subject.

Ulrich Schiefer
Helmut Wilhelm
William Hart

Tübingen, February 2007

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The Initial Encounter: Taking a History and Recognition of Neuro-Ophthalmic Emergencies

U. Schiefer and H. Wilhelm

Ninety percent of clinical neuro-ophthalmology is in the taking of a history (after W.F. Hoyt). Attentive listening, specific questioning and careful evaluation of the information gained make up the foundation of what is primarily a diagnostic subspecialty. The effort invested in gathering this information saves time and avoids unnecessary, potentially dangerous and/or expensive diagnostic procedures.

History Taking

When possible, the previous records of the patient's care should be reviewed prior to beginning the interview. Usually, if the patient will allow, it helps to include in the conversation those other persons who have come to the visit, such as the patient's spouse or close relatives. These people can often provide information that the patient does not know or cannot remember. Patients are often anxious or fearful, and the physician can put them more at ease by conversing in layperson's terms rather than in the technical jargon used by clinicians.

When caring for children, the history taken from one or both parents should not take too long, as the success of the ensuing examination may be hampered by the impatience of the child. When necessary, one should defer some of the more detailed questioning until after the examination has been completed.

The proposed schema for historical questioning, given in ■ Table 1.1, provides a rough outline of the more common details to be discussed, and those that can be compressed or expanded, depending on the details of the case.

When taking the current ophthalmic history, it is of particular importance to determine as precisely as possible the point in time and the speed with which the initial symptoms presented. The longer it has been since the onset of symptoms and the more slowly they may have developed, the more difficult it will be to obtain this information. One should also obtain an accurate account of the eliciting factors, the temporal relationships, accompanying symptoms, and subsequent course of events. Knowledge of these details will allow a quick initial recognition of the more likely sources and various classes of neuro-ophthalmic disease (■ Fig. 1.1).

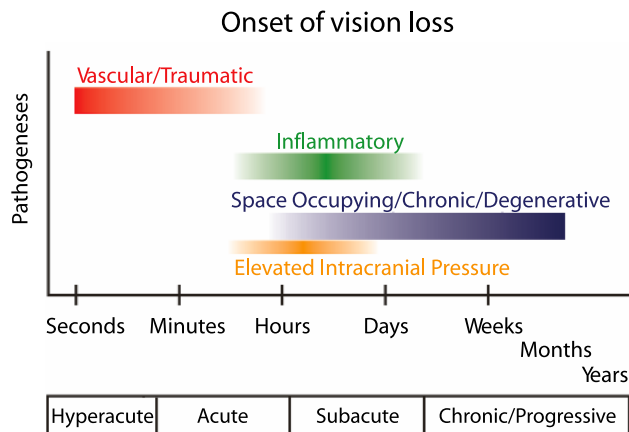


Fig. 1.1. Characteristic onsets and courses of neuro-ophthalmically relevant clinical syndromes

Neuro-Ophthalmic Emergencies

From the very start of history taking, one should be alert for clues to the presence of potentially life-threatening or catastrophically blinding disorders. The disorders in this category are listed in ■ Table 1.2, which also gives corresponding references to the appropriate chapters and sections of this text.

Further Reading

Purvin V, Kawasaki A (2005) Neuro-ophthalmic emergencies for the neurologist. *Neurologist* 11: 195–233

Table 1.1. Catalog of queries to consider when taking a neuro-ophthalmic history

<p>Current ophthalmic history:</p> <ul style="list-style-type: none"> ● Current symptoms: time and date of onset, inciting factors, course since onset ● Symptoms experienced during the encounter ● Associated symptoms of a general (nonvisual) nature ● Management of the problem to date
<p>Comprehensive ophthalmic history (questions appropriate to the time of onset and the patient's age):</p> <ul style="list-style-type: none"> ● For children: Do both eyes see equally well? Does the child have a lazy eye, or has an eye ever been patched for more than a day? ● At what age were glasses first needed, and what visual problem(s) required glasses? ● Since what age have contact lenses been used? Are they hard, semirigid, or soft? ● Has there ever been a problem with eye alignment? ● Has there been any ocular surgery? Eye injuries? Periods of ocular pain and redness? ● Has one or both eyes ever had elevated pressures? Has there been a diagnosis of glaucoma? ● Has there ever been a diagnosis of cataract? ● Is there a congenital color deficiency (for male patients)? ● Have there been other problems: loss of peripheral vision? A disturbance of reading? Photophobia? Poor dark adaptation? Problems understanding visual images? ● Ophthalmic medications? Eye drops?
<p>Family history of eye disease? Birth defects?</p> <ul style="list-style-type: none"> ● Have there ever been any severe, inherited eye diseases in the family? ● Very poor vision? Strabismus? Cataract? Retinal detachment? Elevated eye pressures? Glaucoma? Poor color vision? Optic atrophy? Blindness? Macular degeneration? Poor reading even with glasses in elderly family members?
<p>General medical history (depending on time of onset and/or the patient's age):</p> <ul style="list-style-type: none"> ● Systemic diseases: Heart? Lungs? Liver? Kidneys? GI tract? Brain? Vascular disease? Tumors? ● Operations? Hospital admissions? Accidents? Injuries? ● Metabolic disorders: high blood sugar? Overactive thyroid gland? High cholesterol? Gout? ● Hypertension? ● Tobacco, alcohol, and/or recreational drug use? ● Allergies? ● Medications? (Particularly important!)
<p>Social history</p> <ul style="list-style-type: none"> ● Level of education completed, occupation ● Marital status/number of children ● Handicapped? Disabled? Receiving social security benefits?

Note that many of the suggestions are redundant, a tactic that improves the likelihood of discovering useful information, even if the patient does not fully understand some of the questions