
INTERNAL DISEASES OF THE EYE

AND

ATLAS OF OPHTHALMOSCOPY

By

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Preface to the Second Edition

The favor with which this book has been received by the profession and especially by students of ophthalmology has prompted us to prepare a second edition adhering to the outlines of the first, but including selected material describing and classifying the advances made to date in the knowledge of the etiology, pathology and treatment of diseases of the inner membranes of the eye.

The fundamental concept under which this book was written, emphasizing the pathological changes and physiopathology of the disease, endeavoring to deduce from them the symptoms observed in the fundus, has been fully accepted in science, and other writers have produced books having the same basic approach.

Numerous additions and corrections have been made to the text and new colored and black and white figures have been incorporated for the complete understanding of the descriptions. New sections on toxoplasmosis, angiospastic retinitis, Oguchi's disease, Niemann-Pick's disease and others have been incorporated at their proper places. A new chapter on congenital systemic maldevelopments and tumors has been included. In it a new classification has been proposed, separating the phakomatoses from congenital maldevelopment of the vessels, or angiomatoses. In this chapter one studies in sequence congenital dilatation of the retinal vessels, telangiectasis of the capillaries, or Coats' disease, cirroid aneurisms, the Sturge-Weber syndrome and finally von Hippel's and Lindau's diseases. This grouping of syndromes entails some changes from the accepted views on angiomatoses. However, we think this classification has the advantage of giving a good insight into the pathogenesis of these complex maldevelopments and tumors and points out their association with corresponding diseases of the vessels of the central nervous system.

In the last ten years, the attempt to correlate eye diseases with systemic conditions has successfully increased our knowledge and evolved new syndromes which were previously unknown or considered as separate diseases. Usually the name of one or several of their authors has been given to the syndromes. Although this is undoubtedly a deserved tribute to the men who have painstakingly studied these new associations, still, from the standpoint of the student of ophthalmology, the multiplication of proper names to designate new diseases makes more and more difficult the memorizing and final classification of eye diseases and their characteristic changes in the field of ocular pathology. For this reason, we have attempted, when possible, to give to the new syndromes a clinical and anatomical designation before pointing out the names of the authors.

We hope that this book will continue to fulfill the needs of practitioners and students of ophthalmology and give them a good basis for developing their own capacities for diagnosis and classification, in the large and ever-expanding field of medical knowledge.

I am indebted to Dr. John H. Dunnington for permission to reproduce some of the new colored illustrations from the collection of the Eye Institute of Columbia University. I am also grateful to Drs. Gordon M. Bruce and Isadore Givner and to Miss H. Markham for their help in revising the book.

MANUEL URIBE TRONCOSO

Preface to the First Edition

This book is the outgrowth of lectures on internal diseases of the eye and ophthalmoscopy given for some years past, at the New York Postgraduate Medical School and Hospital. Primarily, it is intended for students of ophthalmology, internists and neurologists who wish to learn how to detect and observe changes in the fundus of the eye, how to interpret them, and how to use the findings for establishing the clinical diagnosis of internal eye diseases, which, in numerous cases, can be correlated to a systemic disorder.

In the author's opinion, success in teaching is due chiefly to the method of presenting the subject. The more scientific approach is first to emphasize the pathological changes and physiopathology of the disease, and then endeavor to deduce the symptoms from the lesions. This method has been found in practice highly superior to the old system of describing long series of symptoms with little or no connection between them, and then noting disjointedly the pathological changes with little or no effort at correlation of the two. The modern advances of ophthalmology, especially in the last decades, and its position in medicine as one of the most scientific of the specialties, justify this attempt to bring to the foreground the pathogenesis and the pathological changes, and from them to find out the clinical signs and the disturbances of functions, as well as their clinical significance.

The ophthalmologist has the advantage of being able to study structural changes in the course of their development and to observe the different stages and final results objectively from the exudate to the atrophy, from vascular changes to hemorrhage and connective tissue development, while in other parts of the body the pathological changes have to be reconstructed from specimens of dead tissues. It is important, therefore, that

the student should be taught how to correlate the ophthalmoscopic symptoms with the pathological lesions, trying to visualize the changes going on in the structures and thus to forecast their final results.

In many instances, the cause and pathology are partially or entirely unknown and therefore some diseases have to be described from the clinical standpoint only. Fortunately, however, in the majority of cases the development and improvement of our instruments and technique, and the larger number of microscopical investigations made, have enlarged our knowledge to such an extent that now we are able to observe the lesions and refer them to the ophthalmoscopic findings and functional disorders much better than formerly.

Great stress has been laid on the classification of several types of diseases. In the same way that a long list of unconnected symptoms appeals only to the memory, so a list of diseases without relationship or connection with each other tends to produce confusion and uncertainty and interferes with an accurate clinical interpretation and diagnosis. With a systematic classification, a given complexus of symptoms permits a positive diagnosis or, at least, one by exclusion.

Physiopathology has received careful attention. A chapter on the physiology and pathology of circulation in the retinal vessels gives the student a better acquaintance with the problems of circulation of the blood in the retinal membrane and its relations to local and systemic diseases.

Modern development in the study of the field of vision and the importance of its correlation with the ophthalmoscopic symptoms, the lesions of the nervous system and general diseases, made necessary the inclusion of a chapter dealing with the normal and pathological field of vision and the proper methods and technique of its examination. The subject has been briefly presented, as is consistent with the purposes and size of the book, but sufficient information has been given to guide the student in his clinical work.

For the purpose of simplification and accuracy of terminology, the author has introduced some new names, such as *retinosis*, *choroidosis*, *perivascular pigment*, and others. These names have, in each case, been used after the old ones were

given. Though not yet sanctioned in ophthalmology, they should be considered by the student as a means of conveying ideas and of improving classification.

My thanks are due to Dr. Frederick Verhoeff for his kindness in reading the text and making valuable suggestions regarding the pathology and description of diseases, and to Dr. Edward Jackson for his obliging assistance in revising the manuscript. I am indebted to Dr. Algernon B. Reese for permitting the publication of many fundus pictures in color, made by the artist, Miss E. M. Freret, and belonging to his large collection of interesting cases; also for the use of some microscopic slides. To Dr. John M. Wheeler, I am grateful for the use of some colored pictures from the files of the Eye Institute of Columbia University and for kind encouragement. To my respected friend, the late Prof. Ernest Fuchs, I owe most thanks for some pathological slides which, years ago, he contributed especially for this book. To Dr. Louise H. Meeker, I am indebted for some slides and for her kind and valuable coöperation. And, finally, I am obliged to Dr. Raymond L. Pfeiffer, for some of the roentgenograms which illustrate this book.

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