

Medical Neuropathology

By

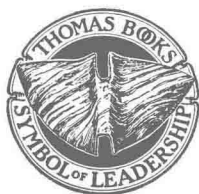
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CHARLES C THOMAS • PUBLISHER
Springfield • Illinois • U. S. A.

CHARLES C THOMAS • PUBLISHER

BANNERSTONE HOUSE

301-327 East Lawrence Avenue, Springfield, Illinois

Published simultaneously in the British Commonwealth of Nations by
BLACKWELL SCIENTIFIC PUBLICATIONS, LTD., OXFORD, ENGLAND

Published simultaneously in Canada by
THE RYERSON PRESS, TORONTO

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Printed in the United States of America

MEDICAL
NEUROPATHOLOGY

In Memoriam
to
My Parents

FOREWORD

THIS foreword is written with the same conviction which Doctor Scheinker has enunciated in the preface of this volume, namely that "the study of neuropathology should go hand in hand with the study of visceral changes," *i.e.*, with internal medicine. The author's situation within a medical service of a large general hospital has afforded an unusual opportunity for the neuropathologist to observe many patients in various stages of disease, which, when seen also at autopsy, provide a moving picture rather than a static final record. His careful choice of illustrative case-material assists the student of neurology or of medicine toward the same accomplishment. Thus, instead of a statistical document of morbid anatomy, there is indeed much neurophysiology and general physiology in his book.

Where neurology, apart from neurosurgery, is taught from the background of an understanding of neurophysiology and neuropathology or by the more prosaic systematic grouping of typical syndromes, this book does indeed serve both methods well by keeping the student always in touch with internal medicine. It is not by accident that nearly one-half of this volume is devoted to neurological disorders which accompany disease of the blood vessels, the heart, and the blood. Likewise, the chapters on acute infections and their treatment with new and potent drugs is a valuable innovation which broadens the outlook of neurology and neuropathology.

MARION A. BLANKENHORN, M.D.

P R E F A C E

NEUROPATHOLOGY in relation to internal medicine and general pathology is the motif of this book. It is intended to serve as the introductory attempt to correlate lesions of the nervous system with those observed elsewhere in the body.

It is the author's conviction that the study of neuropathology should go hand in hand with the study of visceral changes—that, in other words, the science of pathology is not to be divided into separate fields of study of the morbid processes above and below the neck. For, if neuropathology is to retain its practicability, it does so as an integral part of general pathology, not as an isolated specialty.

As demonstrated in the first two chapters of this work, the great majority of vascular disorders are not to be fully understood without profound consideration of the systemic circulation and the function of the heart. In the same way, if general pathology were to confine itself only to the study of visceral changes, numerous pathophysiologic disorders would remain obscure. Whereas the *cerebral* blood flow is controlled chiefly through the systemic arterial pressure, the latter varying with the action of the heart, the venous return and the peripheral resistance, the blood flow to various *viscera* is regulated by the vasomotor centers of the central nervous system. It is the author's belief that failure in nervous control of circulation may contribute to the fatal outcome of certain disorders in the same way as failure in systemic circulation may bear responsibility for a fatal cerebrovascular accident.

Foremost among this book's basic objectives are these three aims:

(1) To bridge the widening gap between neuropathology and general pathology.

(2) To describe the cerebral complications of the more common internal diseases, as seen on wards in teaching hospitals and in private practice, deliberately omitting details of general tissue reactions and cellular pathology not directly related to clinical requirements or to a specific disease. (These writings thus are conceived to serve the needs of both the general pathologist and

the physician who is engaged in the practice of internal medicine.)

(3) To summarize up-to-date findings and views concerning functional or reversible vascular disturbances (angiospastic, vasoparalytic and vasothrombotic phenomena), and to emphasize their relationship to reversible clinical symptoms and to some of the psychosomatic disorders.

(4) To clarify (so far as present knowledge permits) and to emphasize correlations between disturbed function of the visceral organs and the manifestations of the central and peripheral nervous system.

With convenience as a reference work for physicians in mind, each chapter is devoted to the essential lesions of the central and peripheral nervous systems that are secondary to a group of related extracerebral diseases. In instances a condensed description of the systemic disease is included for the benefit of the student of neuropathology.

Chapter sequences deal with the nervous system complications of cardiac diseases, functional and structural vascular syndromes, chemotherapy and exogenous intoxications; polyneuritis and neuritis, nervous alterations in blood dyscrasias, lung diseases, arterial hypertension and liver diseases. The reader will note obvious omissions, some due to paucity or complete lack of information, particularly with respect to nervous lesions of several of the rarer visceral diseases. (For a slight overlapping of material among his three books, of which this is the third work, the author makes apology . . . in several instances continuity of discussion necessitated reiteration.)

ACKNOWLEDGMENTS

TO MY wife, Mary Matthews Scheinker, I am deeply indebted for her editorial assistance in bringing this work to completion. Her unflagging interest has proved inspirational.

The microphotographs are the work of Mr. Joseph B. Homan, Associate Professor of Medical Art (of the University of Cincinnati College of Medicine). The gross photographs were done by Miss Mary M. Caldwell. If the illustrations of this book have any merit, it is due largely to their consistent efforts in behalf of attempting to secure the best possible results. To both artists is extended the author's sincerest gratitude.

The microscopic slides forming the background of this book are entirely the result of hard work and skillful technique on the part of Miss Nelda Valerio. The author is most appreciative of her contribution.

Miss Jeanne Sayre has given much of her time and valuable attention in helping to prepare the bibliography.

For secretarial help, the writer is indebted to Miss Stella Herrmann and Miss Helen Phillips.

To my publishers and friends, Messrs. Charles and Payne Thomas, I again express warm appreciation of a personal interest that has ever been a source of stimulation to the writer.

I. MARK SCHEINKER

Cincinnati, Ohio



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