Medicine

ESSENTIALS OF CLINICAL PRACTICE

SECOND EDITION

EDITED BY
ROBERT W. WILKINS, M.D.

NORMAN G. LEVINSKY, M.D.

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LITTLE, BROWN AND COMPANY BOSTON

Second Edition
Second Printing
First edition, 1970, edited by Chester S. Keefer and Robert W. Wilkins. Copyright © 1970 by Chester S. Keefer and Robert W. Wilkins.

Library of Congress Catalog Card No. 77-72407

ISBN 0-316-94091-7 (C)
ISBN 0-316-94090-9 (P)

Printed in the United States of America

HAL

Notice

The indications and dosages of all drugs in this work have been recommended in the medical literature and conform to the practices of the general medical community at Boston University School of Medicine. The medications described do not necessarily have specific approval by the Food and Drug Administration for use in the situations and dosages for which they are recommended. The package insert for each drug should be consulted for use and dosage as approved by the FDA. Because standards for usage change, it is advisable to keep abreast of revised recommendations, particularly those concerning new drugs.

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Little, Brown and Company
34 Beacon Street
Boston, Massachusetts 02106

Preface

Every textbook should have a purpose and should aim at a particular audience. The purpose of the second edition of MEDICINE is to present a lucid account of those aspects of internal medicine that are essential for clinical practice. It is aimed primarily at medical students. Contributing authors were asked to select for detailed discussion topics in their fields that they felt should be understood and remembered by every American medical student. The editors then attempted to integrate the contributions into a textbook whose size and style would make it attractive to students who wish to read systematically while taking their principal course in general internal medicine. Therefore, we have not compiled a comprehensive reference work, several of which are already available. This book, about one-third the length of such reference texts, represents selectivity based on the premise that students should focus on the essentials. Those seeking more extensive information will find guidance to the detailed literature through the review articles cited in the bibliographies.

Although we have concentrated upon medical students, we believe that the text will also be of value to several other groups, both physicians and paramedical professionals. The incredibly rapid growth of medical knowledge forces us all to read more selectively nowadays. General internists and family practitioners may find this book a useful review, while subspecialists may wish to read parts of it to assuage their guilt about areas of internal medicine that they may have neglected while staying abreast in their own fields.

This second edition has been substantially revised. Several sections have been largely rewritten and every chapter has been thoroughly updated to include concepts developed during the six years since the first edition. As a product of the Division of Medicine at Boston University, the book reflects the clinical and scientific attitudes of individual members of our faculty. As in the first edition, the editors have not tried to homogenize any differences, preferring to allow each writer's individuality and special interests to enliven the book. The authors are all subspecialists, and each has selected from his field of expertise the topics he believes to be of greatest interest and importance. It remains our belief that the recent growth of knowledge precludes the writing of successful textbooks by generalists, particularly in a field as broad as internal medicine.

This book presents individual topics as they are encountered by an experienced practicing clinician. Many clinical situations develop as problems of an organ system. For example, when a patient has a persistent cough, the clinician usually thinks about disorders of the organs possibly involved. Hence, respiratory infections are discussed in the section on respiratory diseases. To describe them in a general section on infections would assume that the clinician has prior knowledge of the specific causative agent, knowledge which is rarely available when he first evaluates a patient. On the other hand, many infections are multisystemic in clinical presentation. These are covered in a new separate section on systemic infectious diseases. In short, in this edition we have attempted to follow clinical practice, instead of insisting upon either an organ or an etiologic approach. Strong emphasis on the scientific basis of medical practice, part of the tradition of Boston medicine, is represented by appropriate aspects of pathophysiology in each section. However, a book of this scope could include only those aspects immediately relevant to clinical problems.

A final word to the student reader. Internal medicine is exciting: it challenges the emotions and the mind with an endlessly varying series of human contacts and with intellectually stimulating problems. At the outset of your career, you may wonder if you can meet the challenge. We trust that our text will help you over the early hurdles. We also hope that you will come to share the feelings of our first editor, Chester Keefer, who said, "I'd rather see a disease or syndrome I've never seen before than play golf, go to a show, read a book, listen to music, or anything else pleasurable I can think of. It gives me more pleasure to make a rare, but correct, diagnosis than to make a hole in one. The thing about medicine is that I love it." Enjoy yourselves!

R.W.W.
N.G.L.

Acknowledgement

The editors are grateful to Mrs. Patricia Simonson, Assistant to the Chairman, for graciously organizing and prodding recalcitrant or dilatory authors and editors. Without her efforts this volume might not have been completed – at least in this decade.

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Chapter 1

Contents

I Some General Considerations

1

Clinical Internal Medicine

Robert W. Wilkins

Internal medicine offers the physician a wide choice of activities and contacts: He can practice, teach, or do research, either singly or together; he can enter administration, public health, or group practice; or he may select combinations of interests, duties, and locations that suit his background and training. Most internists settle on clinical practice, which requires a personal commitment to patients, responsibility for their care, and tolerance for their foibles. If the physician can accept these or, preferably, get positive satisfaction from them, he is well suited for the life of a clinician.

Functions of the Clinician

DIAGNOSIS

The three traditional functions of the clinician are diagnosis, prognosis, and treatment. Diagnosis is the most honored; to be confirmed in a difficult diagnosis is one of the great satisfactions in clinical medicine. Diagnosis requires knowledge and skill, persistence and thoroughness, and above all, an open mind. "Once thought of, the diagnosis was easy" is a cliché, but the greatest source of error is a wrong mental set, established on initial impression or superficial evidence.

Students may be impressed by the way an experienced clinician "senses" a new case. There is nothing mysterious about the process, although often it is so automatic as to be almost unconscious. It requires the acquisition and the mental and written notation of every available scrap of information about a patient. This gathering of data may begin even before the patient is seen, when he first calls on the telephone or walks down the corridor to the office. The good clinician is interested in the pitch and timbre of the voice, the choice of words and expressions, the slap of the gait. On first seeing the patient, he notes for future reference the patient's apparent age, race, coloring, posture and carriage, state of consciousness and attention, degree and nature of discomfort, and the like. These become the basis for the questions to be asked in the history-taking interview.

Obviously, it is necessary to obtain an accurate history, skillfully elicited, carefully interpreted, and critically evaluated. A good history is usually more valuable in diagnosis than the physical examination or even than extensive laboratory studies. Young physicians, however, especially those recently in academic hospitals, tend too often to reverse the relative importance of these diagnostic procedures.

The value of the history is proportional to its accuracy and completeness. While every physician knows this, not every physician is able and willing to obtain a correct, detailed account. Too often the excuse is made, "The patient is a poor historian," when in fact the physician is at fault. In questioning a patient, the physician must accomplish two objectives: (1) convince the patient of the importance and relevance of the questions being asked, and (2) establish the complete sequence of events leading up to the present illness. The physician begins with the circumstances and details of the chief complaint — these are what the patient wants to discuss first, and the physician must concern himself with them even when other more serious problems may be apparent.

The skilled doctor quickly gains the patient's confidence, while at the same time making an appraisal of the patient's reliability. He does not necessarily believe all the patient says, and he is alert to what the patient may be trying to conceal. However, he recognizes that a patient may simply have forgotten many details of the history and may be able to recall them if repeatedly pressed for them, sometimes with the family's help.

As the history-taking proceeds, the doctor begins to formulate tentative ideas about the diagnosis. These ideas should be merely possibilities to be explored, and if not confirmed, set aside. The good diagnostician does not play hunches or jump to conclusions that might set up a mental block. Since he cannot follow every lead and order every conceivable laboratory test and diagnostic procedure, the physician should formulate a plan based upon the more plausible hypotheses.

In terms of the diagnosis, one of the most helpful features of any disease is the evolution of its course.