

THE CHEST

— A HANDBOOK OF ROENTGEN DIAGNOSIS —

LEO G. RIGLER

SECOND
EDITION

THE CHEST

A Handbook of

ROENTGEN DIAGNOSIS

by

LEO G. RIGLER, M.D.
*Professor and Chief, Department of Radiology,
University of Minnesota*

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THE HANDBOOKS OF
ROENTGEN DIAGNOSIS



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Preface to Second Edition

The dynamic character of roentgenology is such that changes in diagnostic methods and criteria occur each year. Although there have been no sensational discoveries in the roentgen diagnosis of the chest during the past five years, many advances have been made in the details of the methods of roentgen examination and in the diagnostic signs. As a result, a new edition of this book seemed desirable. Considerable new material in a variety of aspects has been added, with particular attention to the newer terminology and numerical designation of the bronchi, newer technics in bronchography and some new material regarding the early diagnosis of lung tumors.

New illustrations have been added and others replaced. Because of the difficulties involved in renumbering all of the illustrations, in order to accommodate the added pictures and to keep the chronology of the figures intact, the new illustrations have been given special numbers by adding a digit to the last old number; for example, the two new figures following Figure 237 are numbered 237-1 and 237-2.

It is my hope that this volume will continue to be a useful introduction to and outline for the study of the roentgen diagnosis of chest diseases. Although it does not pretend to be detailed or even complete, it may serve as a source for rapid and brief reference for certain chest conditions.

My thanks are due Mr. William M. Holmes for his aid in preparing the new illustrations. To my loyal secretary, Miss Audrey Derry, my gratitude for her invaluable assistance is here acknowledged.

—L. G. R.

Preface to First Edition

The atlas method of presentation seems peculiarly fitting for the elucidation of a field of roentgen diagnosis, and it would seem to be especially suitable for the consideration of diseases of the thorax. Normal variations and disease processes are more numerous in the chest than in any other part of the body. It is clearly impossible, from a practical point of view, to reproduce more than a portion of the innumerable findings which may appear in roentgenograms of the chest. The films presented here were selected to give the most helpful and useful picture of the roentgen diagnosis of chest diseases possible within the space available. In many instances, to facilitate the presentation of a number of roentgenograms on one page, only a portion of some films has been reproduced. By this means I have attempted to make available a sufficient body of material to provide a foundation of knowledge and a guide for the analysis of any roentgenogram of the chest. No consideration has been given the upper respiratory tract, nor have the diaphragms been treated except in relation to the pulmonary findings.

For convenience of the reader each case has been designated by a single figure number; multiple roentgenograms are indicated alphabetically. In general the labeling has been designed to preserve uniform lettering for the same structures in all the figures on any one page.

In the interpretation of roentgenograms of the chest, as in all phases of radiologic diagnosis, the fullest information available regarding the clinical features is necessary if a rational conclusion is to be achieved. For the sake of brevity only the most salient facts are given in the discussions of the various figures; the apparently categorical conclusions presented are based not on the fluoroscopic or roentgenographic findings alone

but on all the correlated features of the case. The figures illustrate the roentgen findings commonly exhibited. In almost all of the cases presented the diagnosis has been proved.

With few exceptions the cases presented in this volume are from our own files. My thanks are due several colleagues who have kindly permitted me to use their roentgenograms, as indicated in the discussion of the films. I also wish to acknowledge the courtesy of the editors and publishers who have permitted me to reproduce illustrations I have used previously in the following publications: *Radiology*—Figures 36, 39, 56, 57, 130, 211-214, 303 and 305; *International Clinics* (J. B. Lippincott Company)—Figures 120, 129 and 132; *Journal of Thoracic Surgery* (C. V. Mosby Company)—Figures 297 and 312; *Journal of the American Medical Association*—Figure 310, and *Cyclopedia of Medicine, Surgery and Specialties* (F. A. Davis Company)—Figures 45, 47, 59, 61, 62, 64, 77, 301, 302, 306 and 315.

Without the skill and understanding of Miss Jean Hirsch of the University of Minnesota it would have been difficult for me to present the figures as they are now arranged. My sincere thanks are extended to her for the arranging, labeling and mounting of the illustrations and for the design of Figure 9. My thanks are also due Mr. Henry Morris of the University of Minnesota for his splendid work on the photographic reproductions. To the publisher I am indebted for valuable help and advice and infinite patience.

—L. G. R.

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