Cecil-Loeb

# 

BEESON AND MCDERMOTT

# **TEXTBOOK** Cecil - Loeb MEDICINE

Thirteenth Edition

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# **PREFACE**

In his Preface to the first (1927) edition of this textbook, Dr. Russell Cecil said:

In internal medicine, as in other branches of human knowledge, the age of specialism has of necessity arrived, and some of our ablest practitioners even devote themselves in great measure to one disease. In order that physicians and students of medicine might have the benefit of an authoritative and up-to-date treatise on every medical subject, it seemed desirable to prepare a textbook of medicine in which each disease, or group of diseases, would be discussed by a writer particularly interested in that subject.

His judgment of the need for multiple authorship in the vast area of general medicine has now come to be universally accepted and is in fact no longer "news." The Cecil—later the Cecil—Loeb—textbook has served as a standard reference work throughout the professional lives of most physicians now in active practice. As we introduce the thirteenth edition, the third under our editorship, we would like to air some of our views about the organization and function of a textbook for the study and practice of medicine.

The pace of clinical investigation is such that the book needs to be largely rebuilt every four years in order to incorporate new concepts, new methods of diagnosis, and new treatments. In preparing a new edition one of our most important responsibilities is selection of contributors, because about one article in three is written by an author not previously associated with the book. In all such matters we consult extensively with the Associate Editors: Drs. Bearn, Christy, Moore, Plum, and Sleisenger. Before a new author is invited, we have together decided on the area to be covered and on the number of text pages that can be allocated to it. We try, by written instructions and by our own editing, to attain a reasonably uniform style of presentation without sacrificing all individuality of expression. Contributors to previous editions are encouraged to rewrite completely if they wish to. The intent is that each article will not only stand by itself but will also serve as an entry-point to a larger body of knowledge. With that object in mind, special attention is given to selection of references.

As we look back on successive editions, we are

struck by the continual need to alter the method of presenting specific topics. At various times, for example, the disease sarcoidosis has been looked upon as affecting principally the bones, skin, or lungs, but now it is recognized as a truly multisystemic disease which justifies the hackneyed phrase: "protean manifestations." Contrarily and even more often, the changes must be in the direction of further splintering. Note the present intricate classification of disorders of lipid metabolism, and the need to speak of "glomerular diseases" instead of what was once pigeon-holed as "glomerulonephritis."

Reviewers' comments on past editions have of course been interesting to us. In the main they have been commendatory, but it is obvious that people see different roles for something which bears the title "textbook of medicine." Some have felt that an undergraduate medical student would be better served for his first tour of the field by a sort of primer which would provide concise descriptions of major diseases. Certainly the Cecil-Loeb textbook is not intended to be read cover-to-cover. One can argue, nevertheless, that the undergraduate often wishes to obtain knowledge in depth about a subject, just as does the mature clinician.

One reviewer thought that because weakness is among the most common of symptoms, a textbook should contain an article devoted to that one manifestation. We agree that people often complain of weakness, but we are not convinced that an article about it would contain much useful information. Speaking more generally, we question whether the logic of the clinician often turns on the differential diagnosis of a single manifestation. Instead we think the diagnostic computer is usually turning out possibilities on the basis of concurrence of several manifestations, together with such factors as age, sex, and the sequence of events. If that be the case, many entities are likely to suggest themselves, and the clinician will receive more help from a reference work that provides good discussions of each possibility.

The present edition contains much new material and extensive revisions throughout. One major

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section, Respiratory Disease, is wholly new, and another, Environmental Factors in Disease, has been reorganized, expanded, and preceded by an introductory article, "Man in his Environment," by H. E. Lewis. This represents an extension of the theme developed by R. J. Dubos in one of the Forewords to the last edition. But the struggles of man in modern society are so varied and the subject so limitless that in a textbook of clinical medicine one can do little more than characterize the major issues and provide guidance to more extended considerations. In this spirit the reader is now introduced to the text proper by a brief essay on medicine in modern society.

We hope that this new work will once again

serve the needs of students of all ages. We thank our Associate Editors for their many suggestions as well as for their own important discussions. We are grateful to all contributors for authoritative writing. We must acknowledge special indebtedness to Mrs. Helen W. Miller for her faultless handling of hundreds of manuscripts and proofs; she has been the focal link between contributors, editors, and publishers. As always, we have found it a pleasure to work with the able and devoted people who are the W. B. Saunders Company.

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#### HILARY KOPROWSKI, M.D.

#### Rabies

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#### O. DHODANAND KOWLESSAR, M.D.

#### Diseases of the Pancreas

Professor of Medicine, Jefferson Medical College of Thomas Jefferson University. Director, Division of Gastroenterology; Director, Clinical Research Center, Jefferson Medical College and Thomas Jefferson University Hospitals, Philadelphia, Pennsylvania.

#### RICHARD M. KRAUSE, M.D.

#### Rheumatic Fever

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#### CALVIN M. KUNIN, M.D.

Enteric Bacterial Infections (Including Urinary Tract Infections)

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#### HENRY G. KUNKEL, M.D.

#### Immune Mechanisms in Disease

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#### LAWRENCE EDWARD LAMB, M.D.

#### Gravitational Changes

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#### ALEXANDER LEAF, M.D.

#### Posterior Pituitary

Jackson Professor of Clinical Medicine, Harvard Medical School. Chief of Medical Services, Massachusetts General Hospital, Boston, Massachusetts.

#### AARON B. LERNER, M.D., Ph.D.

#### Disorders of Melanin Pigmentation

Professor of Dermatology, Yale University School of Medicine. Chief of Dermatology, Yale-New Haven Medical Center, New Haven, Connecticut.

#### HAROLD E. LEWIS, B.Sc., M.B., Ch.B.

#### Introduction to Environmental Factors in Disease

Senior Member of Scientific Staff, National Institute for Medical Research, Hampstead, London. Member of Faculty of Environmental Studies, University College of London, England.

#### HERBERT L. LEY, Jr., M.D., M.P.H.

Rocky Mountain Spotted Fever; Tick-Borne Rickettsioses of the Eastern Hemisphere; Rickettsialpox; Scrub Typhus; Trench Fever; Q Fever; Bartonellosis Medical Consultant in Foods and Drugs.

#### GRANT W. LIDDLE, M.D.

#### Adrenal Cortex

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#### HAROLD I. LIEF, M.D.

#### Medical Aspects of Sexuality

Professor of Psychiatry, University of Pennsylvania School of Medicine. Director, Division of Family Study; Director, Marriage Council of Philadelphia, Philadelphia, Pennsylvania.

#### PHILIP D. MARSDEN, M.D.

Protozoan and Helminthic Diseases: Introduction; Syndromes Associated with Malaria; Amebiasis; Other Intestinal Protozoa; Helminthic Diseases: General Considerations; The Cestodes; The Hermaphroditic Flukes; Paragonimiasis; Intestinal Flukes; The Nematodes; Tropical Pyomyositis; Eosinophilia in Relation to Helminthic Infections; Arthropods and Leeches as Agents of Disease

Senior Lecturer, London School of Hygiene and Tropical Medicine. Visiting Professor of Public Health, Cornell Medical Center, New York, New York; Assistant Medical Unit, Hospital for Tropical Diseases, London, England.

#### FRED R. McCRUMB, M.D.

#### Plaque

Professor of International Medicine, University of Maryland School of Medicine, Baltimore, Maryland.

#### WALSH McDERMOTT, M.D.

Medicine in Modern Society; Chemical Contamination of Water and Air; Introduction to Microbial Diseases; Foot-and-Mouth Disease; Bacterial Diseases: Introduction; Pneumonia: General Considerations; Granuloma Inquinale

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#### WILLIAM V. McDERMOTT, Jr., M.D.

#### Diseases of the Peritoneum

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#### FLETCHER H. McDOWELL, M.D.

#### Cerebrovascular Diseases

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#### PAUL R. McHUGH, M.D.

#### Dementia; Psychologic Illness in Medical Practice

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#### GORDON MEIKLEJOHN, M.D., C.M.

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#### SHERMAN A. MINTON, M.D.

#### Venom Diseases

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#### CARL V. MOORE, M.D.

Hematologic and Hematopoietic Diseases: Introduction; The Anemias: Introduction; Normocytic Mormochromic Anemias; Diseases of the White Blood Cells and Reticuloendothelial System: Introduction; The Leukemias; Leukemoid Reactions; Conditions Primarily Affecting the Lymph Nodes; Histiocytosis X; The Concept of Myeloproliferative Disorders; Diseases of the Spleen Busch Professor of Medicine, Washington University School of Medicine. Physician-in-Chief, Barnes Hospital, St. Louis, Missouri.

#### STEPHEN I. MORSE, M.D.

#### Whooping Cough

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#### HARRY MOST, M.D., D.T.M. and H., D. Med. Sc.

#### Leishmaniasis

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Rickettsial Diseases: Introduction; The Typhus Group Professor of Microbiology, Harvard School of Public Health, Cambridge, Massachusetts.

#### JAMES R. NELSON, M.D.

#### Hearing Loss; Vertigo

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#### African Trypanosomiasis

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#### ELLIOT F. OSSERMAN, M.D.

#### Plasma Cell Dyscrasias

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#### RUSSEL H. PATTERSON, Jr., M.D.

#### Injuries of the Head and Spine

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#### W. S. PEART, F.R.S., M.D.

#### Arterial Hypertension

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#### ROBERT G. PETERSDORF, M.D.

#### Bacterial Meningitis Other than that Caused by Meningococci and Mycobacteria

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#### MALCOLM L. PETERSON, M.D.

#### Neoplastic Diseases of the Alimentary Tract

Director, Health Services Research and Development Center, The Johns Hopkins Medical Institutions; Associate Professor of Medicine, The Johns Hopkins School of Medicine; Associate Professor of Medical Care and Hospitals, The Johns Hopkins School of Hygiene and Public Health. Assistant Physician, The Johns Hopkins Hospital, Baltimore, Maryland.

#### FRED PLUM, M.D.

Introduction to Disorders of the Nervous System and Behavior; Introduction to Consciousness and Its Disturbances; The Pathogenesis of Stupor and Coma; Sleep and Its Disorders; The Management of Acute Depressive Drug Poisoning; Phenothiazine Toxicity; Headache; The Management of Severe Neurologic Disability; Idiopathic Autonomic Insufficiency; Abnormalities in Respiratory Control

Anne Parrish Titzell Professor and Chairman, Department of Neurology, Cornell University Medical College. Neurologist-in-Chief, New York Hospital, New York, New York.

#### JEROME B. POSNER, M.D.

Delirium and Exogenous Metabolic Brain Disease; Nonmetastatic Effects of Cancer on the Nervous System

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#### JOSEPH M. QUASHNOCK, M.D., Ph.D.

#### Heat and Cold

Colonel, United States Air Force Medical Corps; Commander, USAF School of Aerospace Medicine, Brooks Air Force Base, Texas.

#### OSCAR D. RATNOFF, M.D.

Coagulation Defects: Introduction; Heritable Disorders of Blood Coagulation; Acquired Disorders of Blood Coagulation

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#### SEYMOUR REICHLIN, M.D., Ph.D.

#### The Control of Anterior Pituitary Secretion; The Pineal

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#### EDWARD H. REINHARD, M.D.

#### Polycythemia

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#### DAVID J. REIS, M.D.

## Degenerative and Heredofamilial Diseases of the Central Nervous System

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#### Diseases of Joints

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#### HEONIR ROCHA, M.D.

#### Chagas' Disease

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#### DAVID E. ROGERS, M.D.

#### Psittacosis

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#### FRED S. ROSEN, M.D.

#### Immunologic Deficiency States

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#### LEWIS P. ROWLAND, M.D.

#### Diseases of Muscle and Neuromuscular Junction

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#### JAY P. SANFORD, M.D.

# Klebsiella and Other Gram-Negative Bacterial Pneumonias; Leptospirosis

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#### LABE C. SCHEINBERG, M.D.

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#### RUDI SCHMID, M.D., Ph.D.

#### Porphyria

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#### RICHARD P. SCHMIDT, M.D.

#### Neurologic Diagnostic Procedures

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#### GEORGE E. SCHREINER, M.D.

Obstructive Nephropathy; Toxic Nephropathy; Cysts of the Kidney; Tumors of the Kidney; Miscellaneous Renal Disorders

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#### PETER H. SCHUR, M.D.

#### Systemic Lupus Erythematosus

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#### WILLIAM B. SCHWARTZ, M.D.

The Nephropathy of Potassium Depletion; The Nephropathy of Hypercalcemia; Renal Tubular Acidosis; The Nephropathy of Acute Hyperuricemia; Balkan Nephritis; Disorders of Fluid, Electrolyte and Acid-Base Balance

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#### NEVIN S. SCRIMSHAW, M.D., Ph.D.

Nutrient Requirements; Assessment of Nutritional Status; Nutrition and Infection; Kwashiorkor, Marasmus, and Intermediate Forms of Protein-Calorie Malnutrition; Undernutrition, Starvation, and Hunger Edema; Nutritional Anemias; Anorexia Nervosa; Deficiencies of Individual Nutrients: Vitamin Diseases

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#### Inborn Errors of Amino Acid Metabolism

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#### MARGERY W. SHAW, M.D.

Cytogenetics; Numerical Variations in Human Chromosome Complement; Structural Variations; Inherited Chromosome Breakage; Genetic Counseling

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#### WILLIAM B. SHERMAN, M.D.

Hay Fever and Allergic Rhinitis; Urticaria; Angioneurotic Edema

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#### SOL SHERRY, M.D.

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#### J. B. SIDBURY, Jr., M.D.

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#### LOUIS E. SILTZBACH, M.D.

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#### LLOYD H. SMITH, Jr., M.D., D.Sc. (hon.)

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Streptococcal Diseases: General Considerations; Group A Streptococcal Infection; Clinical Syndromes of Group A Streptococcal Infection; Treatment of Group A Streptococcal Infection and Chemoprophylaxis of Nonsuppurative Complications; Prophylaxis of Streptococcal Infection

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#### H. RICHARD TYLER, M.D.

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#### JOHN P. UTZ, M.D.

#### The Mycoses

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#### WILLIAM N. VALENTINE, M.D.

#### The Leukopenic State and Agranulocytosis; Infectious Mononucleosis

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#### ROBERT R. WAGNER, M.D.

#### Herpes Simplex

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#### BYRON H. WAKSMAN, M.D.

Encephalomyelitis and Other Neurologic Lesions as Sequelae to Viral Infections and Viral Vaccines

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#### JAMES V. WARREN, M.D.

#### Pericarditis

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#### KENNETH S. WARREN, M.D.

#### Schistosomiasis

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#### LOUIS WEINSTEIN, M.D., Ph.D.

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#### THOMAS H. WELLER, M.D.

#### Varicella: Herpes Zoster

Richard Pearson Strong Professor of Tropical Public Health, Director of the Center for the Prevention of Infectious Diseases, and Chairman of the Department, Harvard School of Public Health. Consultant in Tropical Medicine, Peter Bent Brigham Hospital; Consultant, Virus and Parasitic Diseases, Children's Hospital, Boston, Massachusetts.

#### CLAYTON E. WHEELER, Jr., M.D.

Certain Cutaneous Diseases with Significant Systemic Manifestations: Introduction; Cutaneous Manifestations of Internal Malignancy; Erythemas; Contact Dermatitis; Behçet's Disease; Pemphigus; Acanthosis Nigricans; Mast Cell Disease; Lethal Cutaneous and Gastrointestinal Arteriolar Thrombosis; Angiokeratoma Corporis Diffusum; Incontinentia Pigmenti; Hereditary Anhidrotic Ectodermal Defect; Neurofibrosis of Von Recklinghausen; Ainhum; Warts; Orf; Molluscum Contagiosum; Ehlers-Danlos Syndrome; Pseudoxanthoma Elasticum

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Introduction to Respiratory Disease; Pulmonary Structure and Function; General Considerations; Ventilatory Function; Conducting Airways; Alveolar Structure and Function; Pulmonary Circulation; Disability Evaluation; Hypoxemia

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Clostridial Diseases: General Considerations; Clostridial Myonecrosis; Other Clostridial Diseases; Clostridial Gastroenteritis

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