

BOCKUS

GASTROENTEROLOGY

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Dedicated to

the student physicians of the University of
Pennsylvania Graduate School of Medicine
who, throughout the years, have been a never-
failing source of inspiration

Contributors

JOSEPH P. ATKINS, A.B., M.D., M.SC. (MED.)

Clinical Professor of Bronchology, Esophagology, and Laryngeal Surgery, Graduate School of Medicine, University of Pennsylvania; Clinical Professor of Bronchoesophagology, School of Medicine, University of Pennsylvania; Attending Physician, Hospital of University of Pennsylvania and Graduate Hospital of the University of Pennsylvania.

J. EDWARD BERK, M.D., SC.D.

Professor and Chairman, Department of Medicine, California College of Medicine; Visiting Lecturer and Former Instructor, Graduate School of Medicine, University of Pennsylvania.

ABRAHAM BOGOCH, M.D., B.SC. (MED.), D.SC., F.R.C.P. (C), F.A.C.P.

Clinical Instructor, Department of Medicine, University of British Columbia, Vancouver, Canada; Consultant in Gastroenterology, Shaughnessy Hospital, Vancouver; Attending Staff, Department of Medicine, Vancouver General Hospital. Formerly Fellow in Gastroenterology, Graduate Hospital, University of Pennsylvania.

FRANK P. BROOKS, M.D., SC.D. (RADIOL.)

Associate Professor of Physiology and Medicine, School of Medicine, University of Pennsylvania; Acting Chief, Gastroin-

testinal Section, Hospital of the University of Pennsylvania.

LESTER W. BURKET, A.B., DD.S., M.D.

Professor of Oral Medicine, School of Dentistry and Graduate School of Medicine, University of Pennsylvania; Lecturer, Jefferson Medical College; Dean, School of Dentistry, University of Pennsylvania; Chief, Oral Medicine Service, Philadelphia General Hospital, Philadelphia.

DONALD R. COOPER, M.D.

Professor and Chairman of the Department of Surgery, Woman's Medical College of Pennsylvania; Associate Professor of Surgery, Graduate School of Medicine of the University of Pennsylvania; Chief of Surgery, Hospital of the Woman's Medical College of Pennsylvania.

ALVIN J. CUMMINS, M.D., F.A.C.P.

Associate Professor of Medicine, University of Tennessee Medical School, Memphis; Attending Physician, City of Memphis Hospitals; Formerly Resident in Gastroenterology, Graduate Hospital of the University of Pennsylvania.

L. KRAEER FERGUSON, M.D.

Emeritus Professor and Former Chairman, Department of Surgery, Graduate School

of Medicine of the University of Pennsylvania; Consulting Surgeon, Graduate Hospital of the University of Pennsylvania.

ARTHUR FINKELSTEIN, M.D.

Professor and Chairman, Department of Radiology, University of Pennsylvania Graduate School of Medicine; Chief, Department of Radiology, Graduate Hospital of the University of Pennsylvania.

LEAH SHORE FINKELSTEIN, B.S., M.D.

Assistant Professor of Radiology, Graduate School of Medicine, University of Pennsylvania; Assistant Radiologist, Graduate Hospital of the University of Pennsylvania.

FRANZ GOLDSTEIN, M.D.

Associate in Medicine, Jefferson Medical College; Assistant Physician, Jefferson Medical College Hospital and Gastroenterology Clinic, Philadelphia; Formerly Chief Medical Resident, Graduate Hospital of the University of Pennsylvania.

DICK DAVIS HARRELL, M.D.

Chief, Pulmonary Diseases, and Associate in Medicine, University of Pennsylvania Graduate School of Medicine; Associate in Medicine, Graduate Hospital of the University of Pennsylvania.

WILLIAM S. HAUBRICH, M.D., F.A.C.P.

Associate Physician, Division of Gastroenterology, Henry Ford Hospital; Formerly Resident in Gastroenterology, Graduate Hospital of the University of Pennsylvania.

HERBERT REID HAWTHORNE, M.D., F.A.C.S.

Emeritus Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Consulting Surgeon, Graduate Hospital of the University of Pennsylvania, and U.S. Naval Hospital, Philadelphia; Regional Director of Surgery, Veterans Administration, Trenton, New Jersey.

J. FREDERICK MONAGHAN, M.D., B.S.

Assistant Professor of Gastroenterology, Graduate School of Medicine of the University of Pennsylvania; Assistant Attending Physician in charge of Gastroenterology, Bryn Mawr Hospital, Bryn Mawr, Pennsylvania; Associate, Graduate Hospital of University of Pennsylvania.

PHILIP R. NAST, M.D.

Assistant Instructor in Gastroenterology, Graduate School of Medicine of the University of Pennsylvania; Assistant Physician, Division of Gastroenterology, Graduate Hospital of the University of Pennsylvania; Assistant Physician to the Outpatient Clinic, Service of Gastroenterology, Bryn Mawr Hospital, Bryn Mawr, Pennsylvania.

PAUL NEMIR, JR., M.D., F.A.C.S.

Associate Professor of Surgery and Dean of Graduate School of Medicine, University of Pennsylvania; Associate Surgeon, Graduate Hospital of the University of Pennsylvania; Consulting Surgeon, U.S. Naval Hospital, Philadelphia.

ORVILLE F. NIELSEN, A.B., M.D., CAPT. MC, USN

Visiting Lecturer in Gastroenterology, Graduate School of Medicine, University of Pennsylvania; Gastroenterologist, U.S. Naval Hospital, Philadelphia.

JAMES L. A. ROTH, M.D., M.A., PH.D., D.SC. (HON.), F.A.C.P.

Professor of Clinical Gastroenterology and Director, Division of Gastroenterology, Graduate School of Medicine, University of Pennsylvania; Chief, Division of Gastroenterology, Graduate Hospital of the University of Pennsylvania.

ARTHUR M. SCHOEN, M.D.

Associate Professor of Medicine, University of Louisville School of Medicine;

Chief of Section on Gastroenterology, Louisville General Hospital; Formerly Fellow in Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

HARRY SHAY, M.D.

Professor Clinical Medicine, Director, Fels Research Institute, Temple University School of Medicine; Visiting Lecturer in Gastroenterology, Graduate School of Medicine, University of Pennsylvania; Chief Gastrointestinal Division, Department of Internal Medicine, Temple University Medical Center, Philadelphia.

GERALDO SIFFERT, M.D.

Professor of Gastroenterology, Graduate School of Medicine of the Pontifical Catholic University of Rio de Janeiro, Brazil; Chief of Department of Gastroenterology, Hospital da Policlínica Geral do Rio de Janeiro, Brazil; Former Graduate Student in Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

GEORGE N. STEIN, A.B., M.D.

Clinical Professor of Radiology, Graduate School of Medicine, University of Pennsylvania; Associate in Radiology, Graduate Hospital of the University of Pennsylvania.

BENJAMIN HARDY SULLIVAN, JR., A.B., M.D.

Assistant Professor of Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

DAVID C. H. SUN, M.D., D.SC. (MED.)

Associate Clinical Professor of Medicine, The George Washington University; Formerly Fellow in Gastroenterology, Graduate Hospital of the University of Pennsylvania, Philadelphia; Chief of Gastroenterology and Director, Gastrointestinal Research Laboratory, Mt. Alto Veterans Administration Hospital, Washington, D. C.

VAHAKEN O. TACHDJIAN, M.D.

Instructor in Gastroenterology, Graduate School of Medicine, University of Pennsylvania; Assistant Physician, Graduate Hospital and Hospital of the University of Pennsylvania.

ANTHONY S. TORNAY, B.S., M.D., M.S. (MED.)

Associate Professor of Neurology, Graduate School of Medicine, University of Pennsylvania; Chief of Neuropsychiatric Service, Graduate Hospital of the University of Pennsylvania; Frankford and Episcopal Hospitals; Chief of Neurology, Philadelphia General Hospital.

EMANUEL G. TULSKY, M.D.

Assistant Professor of Radiology, Graduate School of Medicine, University of Pennsylvania; Associate Radiologist and Director of Tumor Clinic, Graduate Hospital of the University of Pennsylvania.

FRANCISCO VILARDELL, M.D.

Instructor in Medicine, Graduate School of Medicine, University of Pennsylvania; Research Fellow in Gastroenterology, Graduate Hospital of the University of Pennsylvania; Associate Physician (on leave), School of Gastroenterology, Hospital Santa Cruz y San Pablo, Barcelona, Spain.

JOHN H. WILLARD, M.D.

Formerly Associate Professor of Medicine, Womans Medical College, Assistant Professor of Gastroenterology, Graduate School of Medicine, University of Pennsylvania; Chief of Medicine and Senior Physician, Miners Memorial Hospital, Harlan, Kentucky.

JAMES F. YOUNG, M.D.

Instructor in Gastroenterology, Graduate School of Medicine, University of Pennsylvania.

Preface

TWENTY YEARS AGO, when the first edition of this text appeared, gastroenterology had just emerged as a recognized subspecialty of internal medicine. The time was ripe for a comprehensive text embracing this area in medicine. During these twenty years, gastroenterology has been on the march. Advances in our knowledge of basic physiologic mechanisms were made possible by newer implements of investigation. Many diagnostic methods, including clinical, endoscopic, cytologic, radiologic and biochemical techniques, have been improved or added during this period. Newer and more effective methods of therapy have been introduced. Renewed interest in gastroenterology has been world-wide. This was manifested by international and world congresses in gastroenterology and by the formation of many new national societies throughout the world. These developments presage an era of intense interest in comparative epidemiologic and geographic behavior patterns of gastrointestinal disorders. An appreciation of the great prevalence of severe and lethal gastrointestinal infections and infestations and of nutritional disorders in many areas of the world is now taking place as a result of the communion of societies and of men from all parts of the earth, interested in gastroenterology and nutrition.

For these reasons, it was deemed dutiful and reasonable to attempt a revision of our text. The extensive nature of the task of revision was not appreciated until a beginning was made. However, it soon became apparent that this could not be merely a new edition. A complete rewriting was needed. It was as a result of this experience that I became fully aware of and actually appreciated the tremendous advances that have occurred in gastroenterology during these twenty years.

The staff of authors has been enlarged but the same plan has been followed in their selection. The work continues to comprise contributions of the present faculty, of former faculty members, and of graduate students of the Graduate School of Medicine and the School of Medicine of the University of Pennsylvania. In this way, it has been possible to maintain a certain uniformity in method and in the philosophy of content. In our school of gastroenterology, emphasis has been given always to a sound clinical approach to the problem presented by the patient and his complaints, stressing always an effort toward elucidation of the reasons and mechanisms responsible. An attempt has been made to combine science and art in the work-up of the patient and treatment of his disease. It is hoped that this is reflected in the presentation of material throughout the work.

I have tried to include a discussion of all known primary and secondary disorders of the digestive tract and its appendages as fully as is deemed essential to the purposes of the text, i.e., a text which we hope may prove a helpful companion of the gastroenterologist, the internist and the abdominal surgeon, and a work of reference for the general practitioner and the physician interested in research in gastroenterology.

With the treatment of each disorder, causative factors, clinical features, diagnostic aids, differential diagnosis and therapy are considered in that order. Authors have been selected from our University of Pennsylvania pool on the basis of their interests in and previous contributions to the subject under consideration. The physiologist, clinician, radiologist, pathologist and surgeon have frequently teamed up in a discussion of many topics. Although a fair presentation of differences of opinion in controversial issues is given, an attempt is made to arrive at a reasonable agreement concerning the handling of clinical problems. It is hoped that the reader will be left with tangible suggestions for the planning of appropriate diagnosis and treatment because of this relative uniformity of opinion among our contributors made possible by their previous training and contacts in this clinic.

Each chapter is headed by an outline, sufficiently complete to indicate its content in some detail. It is believed that references will be found adequate within the space permitted. Certainly they are more complete than those of the first edition. Pertinent illustrations have been freely utilized including numerous roentgenograms.

In Volume I, the arrangement of material is essentially the same as that of the first edition, to include the section dealing with the examination of the patient, affections of the esophagus and of the stomach, including duodenal ulcer.

Except for the numerous contributions to this volume by my colleagues, past and present, of the University of Pennsylvania Schools of Medicine, this work could not have been completed. I am most sincerely indebted to all of them for their splendid contributions and continued loyalty.

The radiologists at the Graduate Hospital, Doctors Arthur Finkelstein, G. Stein and L. S. Finkelstein have kindly contributed sections dealing with radiologic diagnosis. The illustrations are from their laboratory and that of Dr. B. P. Widmann, unless otherwise designated. Our pathologist, Dr. Valdes Dapena, has generously supplied a number of illustrations of microscopic and gross specimens. In the preparation of this volume, I am tremendously indebted for the assistance and forbearance of my wife and daughter and secretaries, Katharine Aurandt, Jane DeSilverio and Peggy Hagan. The personnel of W. B. Saunders Company have again exhibited a spirit of cooperation which has made the task much easier of accomplishment. In the production of this edition, they have been colleagues in the true sense of the word.

H. L. BOCKUS

Philadelphia, Pa.

Preface to the First Edition

EXTRAORDINARY ADVANCES during the past three decades in our knowledge of the physiological and clinical aspects of disorders of the digestive tract have necessitated the detachment of the specialty of gastroenterology from the broad field of internal medicine. Although the physician who wishes to become proficient in gastroenterology must be trained first of all as an internist, it is exceedingly difficult for the general internist to be highly skilled and completely informed in this expanded specialty. Nor has it been possible for the general practitioner and the internist who is interested in affections of the alimentary tract to keep abreast of the rapid advances which have been made in the science and practice of gastroenterology. Long experience in teaching the subject to interns, residents and graduate students who are preparing themselves for the specialty of internal medicine or gastroenterology has convinced me of the necessity for a comprehensive text on gastroenterology.

It is fully appreciated that no practicing physician could produce in a lifetime a monograph in this field which would be both exhaustive and authoritative. There are advantages, however, in the systematic recording of general knowledge in a specialty by an experienced physician or group of physicians who have been working together for many years in a teaching institution, and it is this plan which I have followed. The Gastrointestinal Clinic of the Graduate Hospital of the University of Pennsylvania has been divided into sections, presided over by trained colleagues who have acquired highly specialized knowledge in their respective departments. Our contacts and collaboration in the clinics, wards and conference rooms have served, I believe, to develop a broad interest in gastroenterology and in medicine. This relationship has been a constant source of satisfaction to me and, perhaps more than any other factor, strengthened my decision to attempt the formidable task of preparing these volumes.

During the preparation of the text, the constant purpose was to present a discussion of every phase of the subject. Various laboratory and technical procedures are often necessary to the solution of diagnostic problems and to a decision concerning the type of therapy to be employed. All diagnostic aids which have proved to be of practical importance are discussed and their value appraised. Many of the diagnostic problems in gastroenterology cannot be solved without resort to the laboratory or to a technical diagnostic examination. Because of the great importance of roentgenoscopy in diagnosis, illustrations have been included of representative roentgenograms. Since medicine remains an art and not an exact

science, the mechanism and clinical significance of symptoms are emphasized throughout.

Although the purpose has been to include a discussion of every disease and affection of the digestive tract, only those data have been included which in my experience and judgment are of value or definite interest. The bibliography has therefore been made up for the most part of familiar references known to contain original contributions or to expound clearly a thesis or doctrine which cannot be exhaustively discussed in the text. It is hoped that it will supply the interested reader with complete references for the study of most gastroenterologic problems. At the beginning of each chapter is an outline of its contents, and it is hoped that this arrangement will be of help to the reader when he searches for specific material.

I should like to express my sincere appreciation to those many friends and colleagues who have given unstintingly of their time and advice during the preparation of Volume I. My wife's constant assistance in every phase of the work has been of inestimable value; without her aid, encouragement and companionship the task would have been insurmountable. Every chapter and its bibliography have been critically scrutinized and corrected by my colleague, Dr. Thomas A. Johnson, who gave unsparingly of his time and intellect throughout the course of the preparation of this volume. I am greatly indebted also to my secretary, Miss Katharine Aurandt, and her associate, Mrs. Eleanor S. Warner, whose enthusiastic devotion was unfailing. Dr. Walter Estell Lee, Professor of Surgery, and Dr. Gabriel Tucker, Professor of Laryngology and Esophagology of the University of Pennsylvania Graduate School of Medicine, have graciously given their permission to include illustrations from their cases. Most of the illustrated pathologic specimens were resected by Dr. Lee. The roentgen illustrations were obtained from the x-ray laboratories of Dr. Arthur Finkelstein and Dr. Bernard P. Widmann of the Graduate School of Medicine of the University of Pennsylvania, and I greatly appreciate their courtesy in making the material available to me. Painting of the gastroscopic images are from the brush of Miss Ruth W. Williams, who very kindly prepared them under the direction of my colleague, Dr. J. F. Monaghan. I am indebted to Dr. B. B. Vincent Lyon for the use of a number of photomicrographs from a previous publication of his. Finally, I should like to express my appreciation to my taskmasters of the W. B. Saunders Company who, by their unfailing cooperation, have done everything possible to facilitate my efforts.

H. L. BOCKUS

Philadelphia, Pa.

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