dyspneic patients, the physical principles of gases, lung mechanics, ventilation, oxygenation, oxygen transport, and acid-base balance. The underlying physiology governing these topics is emphasized and coupled to related clinical problems and disease states. The chapters dealing with sleep disorders, exercise, and pleural effusions provide well-outlined information and broaden the clinical scope of the book. The closing section about newborn and infant pulmonary evaluation serves as a contrast to the preceding description of adult physiology.

The appendix includes standard pulmonary function values, basic gas laws and formulas, hemodynamic and pulmonary equations, a glossary of terms, and a concise review of pulmonary diseases and treatments. Also included is a list of medicine and physiology textbooks for general reference.

Pulmonary Physiology in Clinical Practice is an ambitious effort by one author. Drawing most of the material from lectures prepared for medical students, the material is applicable to many different health professionals. Designed for audiences who need to know clinically relevant pulmonary physiology in health and disease, the book should be a welcome addition to most libraries. House officers, primary care physicians, respiratory therapists, and nursing personnel will find the book instructive. Anyone desiring a review of pulmonary physiology and its clinical application will benefit by studying this text.

> JOSEPH A. GOLISH, MD EDWARD M. CORDASCO, MD Department of Pulmonary Diseases

## **RESPIRATORY PHYSIOLOGY**

by N. Balfour Slonim and Lyle H. Hamilton C. V. Mosby

This text is a well-organized, informative primer for medical students, nurses, respiratory therapists, and allied health professionals who wish to review the basics rapidly. Fundamental principles are presented without detailed development.

Several changes have been made since the fourth edition was published in 1981. Set off in distinctive type and described within the context of pertinent physiological principles are new or revised topics. These include high-frequency jet ventilation, methemoglobin and abnormal hemoglobins, Swan-Ganz catheter measurement, measurement of pulmonary blood flow, abnormal breathing patterns, and clinical evaluation of thoracoabdominal motion during breathing.

The bulk of the chapter about clinical evaluation of pulmonary function deals primarily with spirometry. It relies heavily on volume-time tracings of forced expirations and maximum voluntary ventilations for representative case presentations. Only a verbal description of the flow-volume loop is given; representative illustrations of this increasingly common graphic presentation of spirometric data would have been useful. The rest of the chapter deals briefly with lung volumes and subdivisions, tests for detection of small-airways dysfunction, and tests of arterial oxygenation. Although another chapter gives an excellent description of determinants of gas diffusion, the effects of anemia and polycythemia are conspicuously absent from the section dealing with factors that affect pulmonary diffusing capacity.

A list of selected readings indexed by chapter helps point students toward more detailed information. Also, the appendix contains a useful table of symbols and abbreviations, a glossary of terms and concepts frequently used, and a set of equations for calculation of respiratory parameters.

> JOSEPH A. GOLISH, MD KEVIN McCARTHY, RCPT Department of Pulmonary Diseases

## MANUAL OF GASTROENTEROLOGIC PROCEDURES

by Douglas A. Drossman Raven Press

Over the past decade, the field of gastroenterology has flourished due, in large measure, to the increased diagnostic precision and therapeutic possibilities made available by endoscopy and other gastrointestinal laboratory techniques. Accompanying this growth have been a number of excellent GI textbooks including those devoted to GI physiology, clinical gastroenterology and hepatology, and atlases of endoscopic findings. *Manual of Gastroenterologic Procedures* competes with none of these. Rather, Drossman has crafted a how-to manual of the highest caliber. It is spiral bound so it will remain open at the desired page and is small enough to be carried in a lab-coat pocket.

This book contains 39 chapters divided arbitrarily into five sections (Tubes, Endoscopy, Needles, Therapeutic Procedures, and Procedures for Pediatric Patients). A few procedures covered in the first edition have been omitted in this second version; many new ones (the bentiromide test for exocrine pancreatic insufficiency, percutaneous endoscopic gastrostomy placement, Grüntzig balloon dilatation of strictures, and the placement of nasobiliary catheters) have been added, reflecting the rapid growth of the specialty.

A risk of a text such as this is that the naive might consider it a suitable "cookbook" for learning to do procedures that can only be taught by formal instruction. While few would be likely to attempt endoscopic retrograde cholangiography in such a manner, some might be tempted to try other techniques, such as colonscopy, without adequate instruction. In the preface, the editor warns against this, and each author has been careful to indicate procedures that require formal training.

Techniques, of course, can vary from one GI unit to another. For example, esophageal dilatation (by any of the four methods discussed) is avoided by the authors for ten to 14 days following any biopsy of the esophagus to reduce the risk of perforation. At the Cleveland Clinic, we do not follow this protocol, and have found no apparent risk to the patient. It would be difficult to prove that one approach is better than another. Perhaps more significantly, it is recommended that fluoroscopic equipment be available for all methods of esophageal dilatation. This is expensive. The Cleveland Clinic has a dedicated GI fluoroscopy unit, but we almost never use it for dilatation by bougies or over a wire.

The chapter dealing with small bowel mucosal biopsy seems a little old fashioned and may be modified in future editions. The book faithfully describes the use of perorally passed suction tubes guided by fluoroscopy to obtain tissue for examination of mucosal disease such as nontropical sprue. However, there are now several reports indicating that tissue of comparable quality can be obtained faster, without x-ray exposure, and with greater patient comfort by proper orientation of endoscopically obtained biopsy specimens. This is an example of how rapidly the field of gastroenterology is evolving.

A short reference list is supplied with each chapter and is generally up to date.

Manual of Gastroenterologic Procedures will be valuable for all trainees in gastroenterology, as well as their mentors. Intensive care units (medical and surgical) might benefit from it. Most groups of practicing gastroenterologists will want one for office or lab. There are enough relevant chapters that the general internist and the internal medicine resident may be tempted to obtain a copy as well.

> WILLIAM D. CAREY, MD Department of Gastroenterology

## COMPREHENSIVE GYNECOLOGY

by William Droegemueller, Arthur L. Herbst, Daniel R. Mishell, Jr., and Morton A. Stenchever C. V. Mosby

Four distinguished chairmen of departments of obstetrics and gynecology have written an up-to-date 40chapter textbook primarily for residents in gynecology. The volume facilitates comprehensive understanding of gynecologic pathophysiology and provides current insights into the psychosocial aspects of gynecologic practice, which the clinical practitioner will find helpful.

The book is divided into five parts. The first is basic science dealing with embryology, genetics, anatomy, and reproductive endocrinology. The second part includes four chapters that discuss topics such as counseling and significant symptoms and signs in different age groups. Current information relating to infections make up two chapters in the third section, written predominantly by Droegemueller and Stenchever. In fourth and fifth parts, Herbst discusses gynecologic oncology and Mishell writes about reproductive endocrinology and infertility.

A unique feature of this book is the list of key terms and definitions at the beginning of each chapter, allowing readers to rapidly become familiar with the subject. Each chapter concludes with a synopsis of important facts. Also, each chapter is written by one author and then critically reviewed and revised by the other three; thus, the reader is given a comprehensive overview from established teachers with diversified backgrounds and interests.

> LESTER A. BALLARD, JR., MD Department of Gynecology