Point-of-Care Testing

Edited by Christopher P. Price and Jocelyn M. Hicks, 580 pp, with illus, Washington, DC, American Association for Clinical Chemistry Press, 1999.

Contributions by an international cast of 37 authors with varying fields of expertise are brought together in 27 chapters with the editors' expressed goal of presenting "a comprehensive treatment of POCT [point-of-care testing] as it exists in health care today." The foreword to this volume justly describes the book as "The first text to bring the analytical principles of POCT technology together with management issues and case studies of actual presentations...."

This book has many laudable attributes. There is coverage of a wide range of topics, from basic analytical principles to issues of management and informatics. There are descriptions of POCT in diverse settings, such as emergency departments, primary care clinics, intensive care units, workplaces, and homes, and of the rapidly expanding spectrum of testing, such as cardiac markers, coagulation, hematology, microbiology, and drugs of abuse. Each chapter has a wealth of up-to-date references, and most chapters are supplemented with useful tables and diagrams. Regarding the controversial issues of costs and benefits of POCT, there are several informative and thoughtful accounts. Not all readers will agree with the viewpoints of individual authors, but the issues, relevant literature, and an evidence-based approach to evaluation of potential benefits of POCT are well described. Considering that POCT crosses many traditional boundaries of departments and disciplines, it is beneficial to have the different perspectives of authors representing fields of pathology, clinical biochemistry, medical technology, emergency medicine, obstetrics, pediatrics, and anesthesiology.

One significant oversight is that, among the many author viewpoints, nowhere is there a representation of the views of nurses who often perform the tests. Failure to identify the important role of nurses is a frequent blind spot in discussions of POCT and should have been addressed in this book. Effective POCT often depends more on daily commitment by nurses than on the talents of laboratory overseers. A second flaw of this volume relates to the extremely rapid evolution of new technologies for POCT, which makes it difficult for any book to include all of the most recent developments. Some important evolving areas, such as noninvasive testing technologies, were barely introduced in this book. Notwithstanding these shortcomings, this book is of value not only to laboratory professionals and clinical staff who directly participate in POCT but also to anyone who manages or directs a clinical laboratory. This volume provides the most useful and comprehensive overview to date of the expanding role of POCT. Few laboratorians will be immune from participation in or competition from POCT.

GLEN L. HORTIN, MD, PhD
Bethesda, Md

Robbins Review of Pathology


Most pathologists and medical students are quite familiar with the superb introductory textbooks of pathology, Robbins Pathologic Basis of Disease (Cotran, Kumar, and Collins) and Basic Pathology (Kumar, Cotran, and Robbins), the textbooks from which many of us in the last 25 years have laid our foundations in the study of human disease. As a medical student (not so long ago), Robbins was my invaluable guide through an intimidating second-year pathology course. As I have made the transition from student to teacher of pathology, I now appreciate more than ever the grand scale of information condensed so skillfully in this single volume text. With the update of information in the basic sciences, the increased emphasis on the application of modern diagnostic techniques, and the incorporation of vibrant color photographs and diagrams, Robbins has improved remarkably with each subsequent edition.

The latest adjunct to this excellent series is Robbins Review of Pathology, a question-and-answer book structured according to the sequence and content of the chapters in the current edition of Robbins Pathologic Basis of Disease. Bound in soft cover, Robbins Review of Pathology contains more than 1100 questions of either the single best answer or extended matching format, in keeping with the current style of the United States Medical Licensure Examination (USMLE). Every question in the book begins with a brief clinical vignette that emphasizes patient presentation and includes relevant laboratory testing. (A list of reference ranges is included on the inside covers.) These clinical vignettes are one of the most appealing features of this book, because the questions integrate clinical information with important pathologic features, and also highlight the essential role that pathologists play in answering clinical questions, rendering diagnoses, and in many cases determining patient care.

The other major strength of this book is the use of stunning color photographs. Appropriate to the visual nature of our discipline, several questions in each chapter are accompanied by full-color clinical, gross, or microscopic photographs identical to those found in the Robbins textbook. Without exception, the photographs are exemplary in color, contrast, and focus.

The answers to the questions are located at the end of each chapter and include a brief, single paragraph discussion, citing the salient features of...
the diagnosis, and a brief explanation that, in most (but not all) cases, excludes the remaining incorrect choices. Specific chapter and page references from both Robbins Pathologic Basis of Disease and Basic Pathology are included for supplementary reading.

In summary, Robbins Review of Pathology is an exceptionally well organized and edited work that promotes active learning through a clinically oriented question-and-answer format, incorporating exemplary color photographs of "classic" findings, and specific page references to the source textbooks. I think this book will certainly be useful for pathologists in training who are seeking a review of basic concepts, and for pathology course instructors who are seeking an effective model for examination questions. This supplementary text will be particularly invited and valued by medical students seeking clinical correlation as they prepare for both curriculum examinations and national board examinations.

MEGAN K. DISHOP, MD
Lexington, Ky

On Call Laboratory Medicine and Pathology


For a long time, we physicians in pathology and related subspecialties have used large textbooks that specialize in specific topics, which forced us to browse through several books to assess and manage the problems we encountered on calls.

The book On Call Laboratory Medicine and Pathology by John Bernard Henry, a very well-known author in clinical pathology, and Sharad C. Mathur, consists of 17 chapters divided into 4 sections that provide a concise and superb approach to the problems on-call physicians may encounter.

The first section, “How to Get the Most Out of the Clinical Laboratory,” contains 4 chapters that focus on verbal and written communication skills and on approaches to general problems in clinical and anatomic pathology by guiding the physician on call with a clear algorithm. The chapters also refresh the memory by providing concise statistical information on laboratory measures.

The second section, “Common Calls in Clinical Pathology From Within the Laboratory and Outside,” is composed of 10 chapters. The first chapter (chapter 5) of this section highlights the problems and provides solutions on instrumentation, information systems, and personnel. The remaining 9 chapters divide clinical pathology into subspecialties, namely, transfusion medicine, hematopathology, coagulation, microbiology, virology, chemistry, immunology, cytogenetics, and molecular pathology. These chapters focus on solutions for such problems as handling different types of specimens (which helped me to resolve an issue during one of my on calls). Important information is either effectively summarized in tables or highlighted in boldface type.

In the third section, “Common Calls in Anatomical Pathology,” 3 chapters focus on surgical pathology and autopsy and address the most important issues, such as frozen sections and special protocols for tissue processing.

The book ends with 8 appendices, which are composed of helpful tables on reference intervals of components in several body systems, including whole blood, serum, plasma, urine, and cerebrospinal, amniotic, synovial, and gastric fluids. One of the unique features of this book I found valuable is the last part of the appendices entitled “Miscellaneous,” which covers common fixatives in surgical pathology and common eponymous tests and determinations.

Unlike the common format of pocket-sized books that are flooded with tables and graphics, this 334-page pocket-sized book includes up-to-date, concise, yet important information given mostly in text format blended with an adequate amount of graphics and tables and supported by references. It is a well-suited guide not only for residents on call in pathology but also for medical students and clinicians.

EDIZ F. COSAR, MD
Maywood, Ill

Practical Differential Diagnosis in Surgical Neuropathology


In Practical Differential Diagnosis in Surgical Neuropathology, the discussion of various tips and helpful hints in the opening chapter is necessary in evaluation of small specimens and is practical with regard to specimen handling and obtaining the clinical and radiologic studies. Differential diagnosis of reactive astrocytosis versus low-grade gliomas is useful, especially to general surgical pathologists in community hospitals, who have to increasingly deal with these types of specimens.

The authors of this book have listed the contents based on the frequently encountered diagnoses in the neurosurgical frozen sections rather than on the anatomic location. Metastatic carcinomas are not included, which I think could have added another dimension to this handbook. Besides, in most institutions, the metastatic tumors constitute most central nervous system neoplasms. Spine and vertebral column disease lesions are also in the realm of neurosurgical cases and discussion of them would have been a useful addition. Color photographs would have added greatly to the quality of this book. Although some of us prefer black-and-white photographs, color photographs are much more impressive for illustrating subtle changes in the tissue. Although the authors discuss "smear" technique, few of the photographs show cytologic preparations. The molecular and cytogenetic studies are mentioned in appropriate areas. Some of the low-power photographs could be of better resolution to illustrate the pattern.

Overall, this is a good, practical guide to differential diagnosis of central nervous system diseases encountered in the neurosurgery–surgical pathology area, and it is particularly handy for practicing pathologists in community hospitals.

CHINNAMMA THOMAS, MD
Maywood, Ill