

BOOK REVIEWS

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The Pharmacologic Approach to the Critically Ill Patient. EDITED BY B. CHERNOW. Baltimore, Williams & Wilkins, 1988. Pages: 975. Price: \$116.50.

This book provides a unique perspective into the management of critically ill patients. There has been extensive revision and updating of this second edition and it most certainly achieves Dr. Chernow's goal of being "a valuable resource providing both clinically useful prescribing information, as well as basic science data and advanced pharmacologic principles." The multidisciplinary approach allows the reader exposure to perspectives from many fields of expertise.

The text consists of 48 chapters divided into four sections. Some overlap of material is seen, as for instance in the chapters on cardiovascular adrenoceptors, resuscitation pharmacology, and catecholamines and other inotropes. This redundancy is less than that usually seen in multiauthored texts and in general is a positive attribute with different perspectives being stressed in each chapter. Tables and illustrations are liberally used throughout the text and are generally quite good, both facilitating comprehension and providing a source for future reference. Extensive and up-to-date bibliographies accompanying most chapters allow for ready access to both historical as well as more recent literature.

In the first section, "Clinical Pharmacology in the ICU," chapters on pharmacokinetics, drug interactions, and pediatric pharmacotherapy provide a sound basis for concepts applicable throughout the text. These "introductory" chapters are appropriately detailed and assume prior exposure to some of the material. Subsequent chapters addressing the pharmacokinetic impact of underlying disease states are well conceived but inconsistent. The chapter on the impact of renal failure has good coverage of specific drugs with well-organized tables, but needs greater attention to the pharmacokinetic and pharmacodynamic impact of the various forms of renal failure, as well as better coverage of hemofiltration and hemodialysis. The latter is given cursory coverage in other chapters as well. Chapters on the pharmacologic impact of congestive heart failure and pulmonary failure lack focus, whereas the chapter on adjustment of medications in liver failure is superb with excellent tables. The first section concludes with a "state-of-the-art" chapter on cardiovascular adrenoceptors, with particular emphasis on alpha adrenoceptors. The text, however, would benefit from a more balanced overview, including coverage of cholinergic and dopaminergic receptors.

The section on resuscitation pharmacology encompasses seven chapters, covering a wide range of topics. These include a basic review of drugs used in Advanced Cardiac Life Support, as well as nice coverage of cerebral protection and transfusion therapy. The colloid *versus* crystalloid controversy is reviewed in a balanced fashion. There are also up-to-date overviews of red cell substitutes and thrombolytic therapy. The latter chapters assume some background knowledge. The chapter on anesthetic pharmacology in critical care is out of place and so cursory as to limit its usefulness.

The third section consists of 20 chapters reviewing various "medication groups." A wide array of topics, including digitalis, oxygen therapy, anticoagulants, and antimicrobials, is covered. Comments will be limited to a few of these chapters. The chapter on diuretics and other medications used in renal failure is organized in a manner inconsistent with the remainder of the text. It lapses into a redundant review of the impact of adrenergic and vasoactive agents on renal function and does not address the crucial issue of pharmacologic strategies for the preservation of renal function. On the other hand, "The

Pharmacologic Approach to Gastrointestinal Disease" presents an excellent review of the prevention and treatment of gastrointestinal disease in critical illness. Chapters on vasodilator therapy, antihypertensives, antiarrhythmics, and bronchodilators are generally quite good. Coverage of pulmonary hypertension and right heart failure is scant. The text is notable for state-of-the-art coverage of catecholamines, amrinone, and glucagon. Unfortunately little mention is made of esmolol. The chapter on "Divalent Ions: Calcium, Magnesium, and Phosphorus" and the one on antineoplastic agents are of particular use to the busy intensivist as they are inconsistently or incompletely covered in other textbooks. Rounding out this section is coverage of seizure therapy, analgesics, psychopharmacology, corticosteroids, insulin and hypoglycemics, thyroid hormones, and topical therapy.

The final section of the text, "Special Considerations in Critical Care Pharmacology," consists of 12 chapters, with particular emphasis on newer frontiers in critical care medicine. This includes coverage of endogenous opioids and other peptides, arachidonic acid metabolites, plasma fibronectin, radiation injury, critical illness and marrow transplantation, computer control of vasoactive agents and calcium, and calcium antagonists in shock and ischemia. Also included are chapters on poisoning (good overview), glucocorticoids and sepsis, electrolyte disorders, and special pediatric problems. Parenteral nutrition is reviewed but enteral nutrition is inadequately covered. Another topic of increasing importance to the intensivist, not reviewed in this text, is the pharmacology of different modes of postoperative and post-traumatic analgesia.

Overall, I have found this a quite useful text that has already been put to use in my intensive care practice. It provides a unique perspective into the management of critically ill patients and succeeds in merging the scientific basis of medicine with clinical experience. As the title suggests, the text stresses the pharmacology and therapy of critical illness. The indexing and extensive bibliographies facilitate use as a reference source. I highly recommend this text to physicians and medical students working in the critical care setting. Similarly, anesthesiologists will find the text a useful and contemporary source of information on the agents used to manage the concomitant illnesses of their patients.

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Anesthesia and Coexisting Disease, Second Edition. EDITED BY R. K. STOELTING, S. F. DIERDORF, R. F. MCCAMMON. New York, Churchill Livingstone, 1988. Pages: 936. Price: \$75.00.

The role of the anesthesiologist has evolved in recent times from simple purveyor of gases and drugs to perioperative consultant for patients with complicated diseases. Consequently, the understanding of the pathophysiology and management of disease states has become vital.

The second edition of *Anesthesia and Coexisting Disease* is the outstanding product of an effort to describe diseases as they relate to the practice of anesthesia. The text is similar in structure and content to the first edition published by Churchill Livingstone in 1983, but with significant updating and the addition of new topics.

The stated desire of the authors is to provide both an introductory text as well as a reference book. They accomplish this by organizing