

## REVIEWS OF EDUCATIONAL MATERIAL

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**The Neuroanesthesia Handbook.** David J. Stone, Richard J. Sperry, Joel O. Johnson, Burkhard F. Spiekermann, Terrance A. Yemen. St. Louis, Mosby, 1996. Pages: 516. Price: \$39.95.

**Fundamentals of Anaesthesia and Acute Medicine: Neuroanaesthetic Practice.** Edited by H. Van Aken. Series editors: Ronald M. Jones, Alan R. Aitkenhead, and Pierre Foëx. BMJ Publishing, 1995. Pages: 307. Price: £33.00.

Several excellent, full-sized textbooks currently describe anesthetic concerns for neurosurgery. The editors of *The Neuroanesthesia Handbook* attempted to provide a pocket-sized book that functions as a mini-textbook for the resident commencing a rotation in a neurosurgical anesthesia area. Several of the editors previously participated in production of *The Manual of Neuroanesthesia*, published in 1989. This new handbook is significantly updated and clearly distinct in approach when compared with the previous edition.

Particularly enjoyable and extremely relevant to the area of neuroanesthesia is the introductory chapter on neurosurgical anatomy. This multi-authored chapter, by Andrew Chenelle, Mark Shaffrey, Christopher Shaffrey, and David Stone, is profusely illustrated with practical drawings of the cerebral anatomy, as viewed by the neurosurgeon during most common procedures. To the novice practitioner who may not appreciate the surgical challenge of areas such as the posterior fossa, this anatomy is quite enlightening. Additional chapters of the book that are particularly informative include the chapters on pharmacology, by Steven T. Farnsworth and Joel O. Johnson, and the sections produced by Richard J. Sperry, including positioning in neurosurgery, posterior fossa surgery, and anesthesia for patients with spinal cord injury. Robert S. Holtzman tackles anesthesia and neuroradiology. He provides a detailed and informative discussion of the problems of anesthesia remote from the operating room and describes functional evaluation in neuroradiology, a process anesthesiologists must understand to provide optimum care. The chapter on anesthesia for craniofacial and craniobasal surgery produced by Drs. Terrance A. Yemen and David L. Bogdonoff also is excellent.

In this multi-authored text, the editors made minimal alterations to each contribution. The occasional stylistic inconsistency may be slightly disconcerting, but if the text is used as expected, the resident and fellowship trainee in neuroanesthesia gains a surprisingly complete and valuable quick reference text. This new work is a fine addition to the teaching arena of neuroanesthesia, and, reasonably priced, it is well within the budget of most anesthesia trainees and clinicians interested in a "handy neuroanesthesia text."

A somewhat larger paperback, but not quite pocket-sized, *Neuroanesthetic Practice*, edited by Hugo Van Aken, is the first of a new series of *Fundamentals of Anesthesia and Acute Medicine* that aims to update readers with authoritative reviews of the principal clinical topics that compose specialty areas in anesthesia. Chapters in this inaugural volume cover fundamentals, but emphasize recent developments and controversial issues within the realm of neuroanesthesia. Some of the more interesting chapters contained within this text include a survey of neurologic diseases encountered in an intensive

care unit, authored by I. Bone, Jar Nicoll, and Di Graham; anesthetic agents and total intravenous and inhalational anesthesia, authored by Hugo Van Aken; and intraoperative and postoperative monitoring of the central nervous system for neurosurgery, written by Christian Werner and Eberhard Kochs. Overall, the contributions to *Neuroanesthetic Practice* are well written and have been solicited from recognized experts in the field of neuroanesthesia. References are complete, and the discussions are thought-provoking. This text would serve as an introductory text to neuroanesthesia, but would most likely be more valuable for a trainee pursuing the specific subspecialty of neuroanesthesia in a fellowship. A practitioner, already reasonably well-grounded in the principles and general knowledge basis of neuroanesthetic practice, would likely enjoy the update. The cost of the volume is not prohibitive, and would make this work a welcome addition to the shelves of most practicing anesthesiologists.

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**The ICU Therapeutics Handbook.** By Paul E. Marik. St. Louis, Mosby-Year Book, 1996. Pages: 434. Price: \$35.95.

For anesthesiologists and other physicians who work in intensive care units (ICUs), quick and easy-to-use reference materials are nice companions to put in the pockets of a white laboratory coat. This is the purpose of *The ICU Therapeutics Handbook*, written by an internist-intensivist at St. Vincent Hospital in Worcester, Massachusetts. It is an easy-to-read text of 434 pages, including the index, and its 66 chapters are divided into 8 sections: respiratory, cardiovascular, metabolic and endocrine, gastrointestinal, neurology, infectious disease, miscellaneous, and a brief humor section. The majority of ICU practice is reasonably well covered, albeit in brief or absent detail. Because of the book's nature and purpose, references are rarely mentioned. I found this to be a major liability, and a few references that the author thought were important could have been included on the final page of each chapter.

This book has several positive aspects. Many of the chapters had good diagrams that outlined various courses of management. This reduced the size of the written text and allows a junior house officer to quickly visualize different therapeutic options, depending on the patient's status. As the old adage says, "A picture is worth a thousand words." Unfortunately, patients often do not follow the courses shown in diagrams. Figure 4-2, "Mechanical ventilation flow diagram," was cumbersome to follow, but many others were quite succinct and lucid.

Part 1 is composed of 12 chapters that review respiratory critical care. Chapter 3, although only two pages, contains a table that lists many values and equations pertinent to respiratory physiology. The house officer who knows these can avoid that embarrassing silence that often follows questioning from a malevolent attending physician.

Part 2, The Cardiovascular System, is of great value to the house officer and those clinicians who infrequently treat cardiac problems. The sections on acute myocardial infarction and the treatment of tachyarrhythmias were well done. Hopefully, those physicians who are Advanced Cardiac Life Support certified will notice that the author



## REVIEWS OF EDUCATIONAL MATERIAL

deviated from following Advanced Cardiac Life Support guidelines in the chapter on cardiopulmonary resuscitation. Part 3, Metabolic and Endocrine Problems in the ICU, was well presented and should satisfy the practical requirements for most general intensivists. Chapter 27 contains a well written, yet succinct, review of renal failure and its treatment, including the newer modalities of continuous renal replacement therapy. In Part 4, The Gastrointestinal Tract, the topic of chapter 33 was gastrointestinal prophylaxis. This consisted of only a one-page diagram, but should have had discussion of the pros and cons of sucralfate therapy, antacids, and H-2 blocking agents. Part 5 adequately discussed basic neurology as seen in the ICU, and Part 6 had a reasonably broad review of infectious complications and therapy. Part 7 contained 20 chapters of miscellaneous topics, such as brain death, burns, and obstetric complications.

The problem with any single-authored text is the lack of review by one's colleagues or coauthors, and this was evident in the text. Basilar skull fracture is, to a vast majority of anesthesiologists, a contraindication to nasotracheal intubation because of the concern for placing an endotracheal tube into intracranial contents. However, the author states "this complication is exceedingly rare and probably related to poor technique." Even if the reader agrees that this statement possibly may be true, how many house officers have good technique? Also, this book does not discuss what constitutes good *versus* poor technique. Phenylephrine is mentioned for treating hypotension after intubation. However, the recommended dose of 0.5–1 mg is potentially dangerous and capable of producing profound and sustained hypertension. When discussing T-piece weaning trials, the author states that the trial should be terminated if any of five

physiologic abnormalities occur. Three of the five are appropriate, but most intensivists would agree that such a trial should be halted long before an ICU patient experiences a heart rate of 140 beats per minute or a systolic blood pressure of 180 mmHg. Hopefully, junior house officers will know this also.

Metered-dose inhalers are an effective means to deliver B-2 agonists when treating asthma, but they are not mentioned. In at least two places, the author suggests avoiding pancuronium for muscle relaxation because of its histamine release (which it does not do) and its propensity for producing tachycardia. Most anesthesiologists/intensivists are comfortable using pancuronium in critically ill patients when necessary, knowing that profound tachycardias are rare. In the chapter in which myasthenia gravis is discussed, the author warns that methoxyflurane, decamethonium, gallamine, halothane, and curare increase muscle weakness. This may be true, but the first three drugs have seen little if any use for 15 years, and the last two drugs now see little use, at least in the United States. (But perhaps I should not be too critical, because *The Washington Manual of Therapeutics* [28th ed, 1995] continues to list ether as a problem drug in myasthenia gravis.)

In conclusion, the concept of providing a brief and succinct synopsis of critical care that fits into a laboratory coat pocket is a laudable undertaking. This book has much in its favor, but the user should be aware of its deficiencies.

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