

■ REVIEWS OF EDUCATIONAL MATERIAL

James C. Eisenach, M.D., Editor

Rapid-sequence Review of Anesthesiology: With Time-limited Pressure. By Won K. Chee. Boston, Butterworth-Heinemann, 1997. Pages: 168. Price: \$35.00.

In the late 1970s, there was no American reference textbook of anesthesiology. A good introductory textbook had been available for 20 years, and a few subspecialty textbooks were in print, but no one on this side of the Atlantic Ocean had put together a complete reference textbook on anesthesiology for some time. By the late 1980s, so many textbooks on anesthesiology had been published that they could be grouped according to their purpose and function. Anesthesia textbooks were available as general reference textbooks, subspecialty monographs, introductory books, review textbooks, handbooks, and pocket manuals. Second and third edition reference textbooks grew to two or three volumes to include more facts; one publisher reduced print size to prevent a text from becoming overweight. Portability became a problem for some excellent publications. Well-motivated students could and do still study the entire contents of these texts over many months, yet the need for distillations of the expanding anesthesiology knowledge base arose for times when a quicker review was needed. Dr. Chee has provided us with a review textbook that might be studied quickly. Its format is devoted totally to outlines and tables and an occasional schematic diagram, allowing a reader to skim through information in a rapid sequence.

Although the outline format might limit the depth of content possible, the learning style of the reader must be considered when a review textbook is chosen. Most publications use sentences, paragraphs, tables, and figures to convey knowledge to a reader. We have been learning that way all our lives. Some students have a particular affinity for a question and answer format. There are popular review textbooks composed almost entirely of multiple choice questions. Patient-oriented reviews are structured around evaluation and management plans for actual or imagined patients. Some students have a particular facility for thinking in terms of outlines and lists; certain tasks in medicine such as considering differential diagnoses or treatment options are particularly well suited to outlines.

Those who like to think in terms of outlines will appreciate Dr. Chee's review. It literally fulfills its claim to provide succinct and relevant information in a highly concentrated and clarified form for those who seek quick, conceptual orientation in clinical anesthesiology. Superficiality is the price paid for brevity here, but textbooks much larger than this one can also be called superficial when compared with a multivolume reference work: review textbooks are designed for different purposes than reference textbooks. This review will refresh the reader's organization of facts, although a much greater depth of knowledge will be necessary. Its lack of index and references limit further reading, although the book's tables are often helpful for collecting, comparing, and contrasting some areas of important clinical information (*i.e.*, management of valvular heart diseases, p 32). Those who seek a rapid-sequence review and prefer to learn in an outline format will appreciate Dr. Chee's contribution to the literature.

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The Critically Ill Cardiac Patient: Multisystem Dysfunction and Management. Edited by Vladimir Kyvetan and David R. Dantzker. Philadelphia, Lippincott-Raven, 1996. Pages: 432. Price: \$139.00.

The editors of *The Critically Ill Cardiac Patient: Multisystem Dysfunction and Management* state that the book is directed toward cardiologists in training and in practice. The editors believe that cardiology fellowship training does not place enough emphasis on the multisystem dysfunction that exists in critically ill cardiac patients. This book is intended to offer a state-of-the-art collaborative view of critical care management. Among the 50 contributors are academic cardiologists, anesthesiologists, internists, surgeons, obstetricians, pulmonologists, and radiologists.

The 417-page book contains 22 chapters covering a range of topics. Chapter 1 provides a cursory overview of the pathophysiology of cardiac failure. Presumably those with extensive cardiology training would require little review of this subject. Chapter 2 addresses assessment of the high-risk cardiac patient for non-cardiac surgery. This complicated and well-researched topic is adequately reviewed, and an algorithm for preoperative risk assessment is presented. However, as an anesthesiologist who commonly addresses issues of risk assessment with cardiologists, I would like to have seen a more comprehensive review of this topic. In addition, the comment that, "It is generally accepted that the negative inotropic action of general anesthetics makes spinal anesthesia preferable (when possible) for patients with severe left ventricular dysfunction," is a gross simplification of a complicated issue. Chapter 21 provides a nice overview of the various models used for risk stratification of cardiac surgical patients, and Chapter 22 does an excellent job of summarizing post-myocardial infarction risk stratification.

Chapter 3 provides a summary of ventilatory support in cardiac failure with specific emphasis on the effects of intrathoracic pressure changes on ventricular function and venous return. No mention of some of the more contemporary methods of ventilatory support such as pressure support, reverse I:E ratios, or high frequency ventilation are made.

Chapters 4 and 5 summarize the basics of oxygen transport and delivery and of regional blood flow in critically ill patients. Chapter 6, entitled *Cardiac Metabolism and Nutrition Support*, offers a nice summary of cardiac metabolism but makes no specific recommendations on providing nutritional support.

Chapters 7, 8, and 9 review renal, abdominal, and neurologic disorders in critically ill patients. The genesis, diagnosis, and treatment of renal failure is well covered. Included is a summary of the various methods of hemofiltration and dialysis. The chapter on abdominal crises is concise and well written. The chapter on neurologic disorders addresses cerebral emboli and cerebral hypoperfusion as well as concurrent cerebrovascular and coronary artery disease. It also includes a short explanation of alpha-stat and pH-stat blood gas man-

REVIEWS OF EDUCATIONAL MATERIAL

agement during hypothermia. Contrary to what is stated in the chapter, neurologic outcome studies comparing alpha-stat and pH-stat blood gas management during hypothermia CPB have now been conducted. Similarly, a superficial treatment of DHCA is offered.

Chapter 10 provides a thorough review of the pathophysiology of septic shock. Chapter 11 provides some basic information on the transport of critically ill patients from one institution to another. Chapter 12 is a comprehensive overview of pharmacologic cardiovascular support and is a well-developed chapter. Chapter 13 provides a broad overview of the hematologic and coagulation abnormalities likely to be encountered in the ICU. Chapter 14 is a concise summary of the diagnosis and treatment of cardiac trauma.

Chapter 15 provides a comprehensive overview of the short- and long-term management issues associated with heart, lung, kidney, liver, and intestinal transplantation patients. The section on preoperative cardiac assessment of liver transplantation candidates is particularly good. Chapter 16 covers obstetric emergencies and is one of the best chapters in the textbook. The cardiorespiratory changes of pregnancy are well covered, as is the significance of various cardiac lesions. Eclampsia and preeclampsia, amniotic fluid embolus, hemorrhage, artificial valves, and anticoagulation are all well covered. Chapter 17 provides an excellent review of commonly encountered cardiac toxicities in the ICU.

Chapter 18 is a review of ICU-based cardiorespiratory monitoring and is divided into two sections. The first section is devoted entirely to TEE. This section provides a basic overview. The second section covers respiratory mechanics. This section provides the basics needed to understand more comprehensive respiratory mechanics. Chapter 19 deals with the cardiac complications of invasive procedures and provides a broad overview. Chapter 20 covers critical care radiology, with emphasis primarily on chest radiograph and CT findings.

The textbook is well indexed, and the references are fairly current. There are ample illustrations, tables, and charts. Despite the fact that there are many contributors, the style of the book is consistent from chapter to chapter, and there is little or no redundancy.

Overall, this textbook would be most useful to cardiologists and cardiology fellows with little previous exposure to the critical care environment. As such, this text would provide a nice introduction. Those individuals desiring a more comprehensive textbook or those more actively involved in critical care medicine will want to purchase one of the standard critical care textbooks.

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The Electronic Anesthesiology Library on CD-ROM. Philadelphia and Baltimore, Lippincott-Raven Publishers and Williams and Wilkins, 1996. Price: \$495.00, individuals (\$395.00, related society members); Annual updates: \$125.00, individuals (\$99.00, related society members).

The Electronic Anesthesiology Library (T.E.A.L.) on CD-ROM is a compilation in multimedia format of four published anesthesiology journals (*ANESTHESIOLOGY*, *Anesthesia and Analgesia*, *British Journal*

of Anaesthesia, and *The Canadian Journal of Anaesthesia*) from 1991-1995 inclusive. The single CD-ROM disk is advertised to contain full text, graphics, and references of all published material in the journals and is supplemented with most MEDLINE® abstracts for cited references. The disk contains the Knowledge Finder® software with installation taking approximately 5 minutes. A well-written and detailed manual accompanies the disk and is valuable if the user is not experienced with electronic search strategies. The system is usable with PC-compatible (with Windows®) or Apple Macintosh® computers with nominal hardware requirements.

Multiple search strategies can be used with this resource. Standard keyword, textword, and author searches are easily accomplished, and using Fuzzy logic searching, wide-scope searches are quickly performed. An option using "Boolean" searching allows the user to tighten the search focus using the logical connectors "AND, OR, or NOT" to precisely accomplish an intended search. A word variants feature allows one to use an intended search word with or without derivative words included, which opens or restricts searches significantly. Multiple "dictionaries" are included that are really search categories (author, review articles, and so on) to hasten or allow tightly focused searching.

Search access is speedy, and results summaries are provided with order of relevancy, similar to Internet searching. When selecting from search results, document text is displayed and a separate window for figures and tables appears with an easy scroll feature. Hot text links to the figure window, sticky notes (to identify and download a piece of text), MEDLINE® abstract links, and printer commands are also straightforward and add nice complements to the standard features as are available in larger library database search programs. Finally, set-up functions for user preferences and a useful Help submenu are included to expedite future searches and assist the less-experienced user.

Overall, T.E.A.L. is a winner. For quick searching a reference that a clinician needs or for performing an exhaustive review of what has been published in these four journals, this is a great tool. The greatest limitation is the database that can be covered in a single disk (a 5-year range of four journals). Although not exhaustive, this is a great starting place for journals we use frequently. This disk certainly will save shelf space in our offices, and the Knowledge Finder® software can be installed in multiple locations for use by a single user. I found searching and printing on multiple occasions to be easy and productive. I did not attempt to import a table or figure to another software program for slide preparation, but this would be a welcome feature for teaching purposes (if legally permissible). I certainly was able to search and quickly find articles I remembered from only a piece of the reference. This is efficient compared with using the semi-annual or yearly indices of each journal. My residents and colleagues appreciate the more accurate citations than I have previously provided. The price listed is substantial for this powerful resource, which may preclude some individual purchases. With further advancements in technology, more data compression, and faster access time, we will obviously increase our use of CD-ROM resources. I just found a large amount of shelf space in my office and the impetus to send my highly revered journals to another location for continued use.

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