Book Reviews

Interactive Anesthesia Library on CD-ROM

Lippincott-Raven, 1995. CD-ROM. \$125.00 US.
ISBN: 0-397-51748-3

The Lippincott-Raven Interactive Anesthesia Library is a single CD-ROM that contains six full text anesthesia-related books: *Clinical Anesthesia* 2nd edition (Barash, Cullen, Stoelting), *Handbook of Clinical Anesthesia* 2nd edition (Barash, Cullen, Stoelting) *Neural Blockade* 2nd edition (Cousins, Bridenbaugh), *Review of Clinical Anesthesia* (Silverman, Connelly), *Pharmacology and Physiology* 2nd edition (Stoelting), and *Anesthesiology: Problem Oriented Patient Management* 3rd edition (Yao, Artusio) and a two-volume general medical text: *Textbook of Internal Medicine* 2nd edition (Kelly). A pain management text is not included in the package and would be a welcome addition. Review of the individual texts has been done by others so I will concentrate on the CD-ROM format: ease of setup, search speed and power, interactively, and cost.

Installation on a 486/66 under Windows 3.x was quick, easy and pain free. The same could not be said for attempted installation under Window 3.x with a shell that replaces Program Manager (PC Tools for Windows Desktop). *Interactive Anesthesia* had to be manually added to the desktop without the guidance of any useful information in the user's manual. *Interactive Anesthesia* can also be installed to Macintosh systems or under Windows 95 on a PC.

Once installed, the programme ran flawlessly. The initial screen allows each of the included volumes to be accessed and read. Integration between texts by hyperlinks is available amongst most of the volumes and allows access to case studies (Yao) or lists of question (Silverman) related to a chosen topic. The search engine supports simple and complex searches across all the included volumes. Modification of searches using Boolean logic, wildcards and proximity criteria are supported. Even complex searches were completed rapidly. References in the texts are highlighted and the full citation can be accessed by clicking on the reference number. Full reference abstracts are not supplied with the programme.

Interactive Anesthesia is available in two formats: a "professional edition" (\$395.00 US) and a "resident edition" (\$125.00 US). The "resident edition" is programmed to expire one year after installation and must include a letter from a Programme Director with the order. The "resident edition" would appear to be poor value. A company spokesperson was unable to give any information on upgrade policies for the "professional edition".

Interactive Anesthesia Library on CD-ROM is a reasonably complete collection of important texts related to anesthesia. The search capability across multiple volumes is impressive. The potential buyer must decide whether the high cost is reasonable for the mix of texts provided or whether a more selective purchase of individual volumes would make more sense. As part of a department library, the CD-ROM format allows much more rapid searches than could be accomplished with the hard copy books and would likely make economic sense.

The "resident edition" makes little economic sense in four or five year residency.

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Brain Injury and Pediatric Cardiac Surgery

R.A. Jonas, J.W. Newburger, J.J. Volpe (Eds.). Butterworth-Heinemann, 1996. 416 pages. 125.00 US. ISBN: 0-7506-9567-6

This publication from the Boston Children's Hospital was inspired by the tragedy of brain injury in the paediatric cardiac surgical population. The book is multi-authored and has contributions from 25 experts in fields such as paediatric neurology, cardiac surgery, anaesthesia, radiology, neonatology and cellular biology. There are 405 pages comprising 26 chapters.

The book is divided into six sections. Roughly half is devoted to developing a framework for the understanding of central nervous system pathophysiology in the paediatric population. The first three sections deal with development of the central nervous system, assessment of CNS function and mechanisms of neurological injury. The remaining three sections deal with clinical and laboratory studies of hypothermia and circulatory arrest during cardiopulmonary bypass, the Boston Circulatory Arrest Study, and new strategies for cerebral protection.

For a multi-authored text the style is quite uniform, with the exception of the chapter on Excitotoxicity and Nitric Oxide. Nevertheless, this chapter is clear, concise, and well written and the divergence in style merely highlights its importance.

From a clinical perspective, there is an excellent chapter on pH management during hypothermic cardiopulmonary bypass which emphasizes differences between paediatric and adult patients. Through retrospective studies that have suggested worse developmental outcome with more alkaline pH strategies in infants undergoing deep hypothermic circulatory arrest, the author has proposed a re-thinking of current pH management and outlined further prospective investigations to better define optimal pH strategy.

Additionally, there is an excellent discussion concerning pharmacological brain protection, including detailed information on NMDA receptor antagonists.

A minor shortcoming is the lack of more data on barbiturates and their role in cerebral protection. Two paragraphs buried in the chapter on NMR spectroscopy outline the deleterious effects that barbiturates have on high-energy phosphate levels in brain tissue. The authors only briefly refer to the reduced CMRO₂ and antioxidant properties of barbiturates, yet, their use has been incorporated into the prospective circulatory arrest study in Boston. Further presentation of experimental evidence for and against the use of barbiturates with deep hypothermic circulatory arrest would strengthen the discussion on pharmacological brain protection.

In summary, this text is an excellent resource for all those undertaking care of the paediatric cardiac surgical patient. For those primarily involved in adult cardiac surgery, it provides an exceptional reference to broaden our prospective about

brain injury in association with cardiopulmonary bypass in all patients.

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Blood Conservation in the Surgical Patient

M.R. Salem (Ed.). Williams & Wilkins, 1996. 445 pages.
ISBN: 0-683-07531-4

"Blood conservation in the surgical patient" is a 13 chapter text written by 39 contributing authors. It reviews the different strategies available to decrease the utilization of allogeneic blood products in a variety of clinical situations and/or operative procedures.

The first five chapters deal with the basic principles underlying the use of blood products. Chapters five to ten describe the techniques destined specifically to decrease the need for allogeneic blood products, including preoperative autologous blood donation, acute normovolemic hemodilution, deliberate hypotension, blood salvage techniques and blood substitutes. A chapter is devoted to blood conservation in Jehovah's witnesses. The last two chapters present the anaesthetist's and the surgeon's perspectives on blood conservation in special situations.

The material presented is up to date and generally well referenced. Each chapter is headed by a table of contents which will help the reader locate the information pursued. The absence of a chapter devoted specifically to pharmacological blood conservation is annoying. Repetitions are frequent, specially in the last two chapters. These final chapters contain some useful information, but are of very unequal quality.

Blood conservation has become an important issue in the care of surgical patients and this book provides clinically helpful, practical information on the subject. As presented, the text lacks the homogeneity required to be read integrally but may be recommended as a valuable reference to all those concerned by transfusion medicine in the surgical context.

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Principles of Transfusion Medicine, 2nd ed.

E.C. Rossi, T.L. Simon, G.S. Moss, S.A. Gould (Eds.).
Williams & Wilkins, 1996. 952 pages. ISBN: 0-683-07386-9

From its Introduction, in which the editors review the historical perspective of blood transfusions, to the final section on Blood Transfusion Services heading into the 21st century, this text provides important information as well as easy reading for those involved in the practice of Transfusion Medicine. The book has been divided into Sections dealing with various components of transfusion therapy (red blood cells, white cells, platelets, plasma) and each section is followed by special problems associated with these therapies. The sections on Transfusion in the Surgical Patient, and Hemostasis and Surgery should be mandatory reading for those involved in perioperative transfusions. After reading the chapter on the Physiological Basis of Transfusion, most anaesthetists will either reaffirm or change their current practice of transfusing. Whether it is information on graft-versus-host disease in the in-family donor, or the incidence of transmitted diseases, answers are easily found in this book.

Although many chapters are aimed at haematologists and haematopathologists, this text proves to be an important reference tool that will keep the practitioner of transfusion medicine on top of growing public awareness. It would be a desirable addition to an Anaesthesia library.

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Management of Migraine

E.L.H. Spierings. Butterworth-Heinemann, 1996. 150 pages.
45.00 US. ISBN: 0-7506-9623-0

The author, Dr. Spierings, is a neurologist and Director, Headache Research at Brigham and Women's Hospital associated with Harvard Medical School in Boston. The information is organized in a logical clinical fashion. The book is divided into eight chapters which detail the definition, symptoms, diagnosis, abortive and preventive therapy, triggers, childhood migraine and non migraine headache. A broad spectrum of pharmacological therapy is covered in detail. The text provides a balanced approach to therapy discussing environmental, hormonal and dietary factors related to migraine. This text represents a meticulous review of migraine and summarizes a state of the art approach.

The author has performed an extensive and current review of the literature. The references cited form a valuable bibliography. The findings of various studies have been carefully documented in numerous figures. Where studies have used different methodology or made different conclusions these have been analyzed and presented in the table format. In essence, this book is a collection of meta-analyses. This detailed comparison and summary of the literature represents an evidence based approach to the management of migraine headaches. The author has combined basic science information with clinical trials to provide a foundation for therapeutic decision making. The book is concise, yet it assembles a large data base. It would be a useful resource for physicians with an interest in headache.

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