Book reviews

Cardiac Anesthesia: Volume 2 - Cardiovascular Pharmacology

Kaplan JA (Ed). Grune & Stratton, New York (Academic Press Canada) \$94.00

Five years ago Kaplan published his classical book – Cardiac Anesthesia – which has become the major reference text for cardiac anaesthetists. With the explosion of information on the cardiovascular effects of various anaesthetic agents, plus major changes in cardiac anaesthetic techniques, a concise up-to-date textbook in this area was imminent. Cardiac Anesthesia – Volume 2 is a multiauthored very readable text that fills this bill.

The book is divided into seven basic sections based on the pharmacology of both the newer and the more established anaesthetic drugs. This is followed by sections on clinical pharmacology related to the management of ischaemic heart disease, cardiac failure, hypertension, arrhythmias, and cardiopulmonary bypass. The chapters are well illustrated and the references are relatively current (1982). There are several outstanding chapters written by individuals actively involved in cardiac anaesthesia. The chapter on the new narcotics by Moldenhauer brings the newer and futuristic agents into the perspective of present day anaesthetic practice. Pharmacokinetic data is presented with the objective of utilizing continuous infusion techniques to administer these newer agents. The chapter on the effects of inhalational anaesthetics on the coronary circulation by Curling and Kaplan is up-to-date and well done. The three chapters by the editor dealing with myocardial protection, nitrate therapy and the treatment of cardiac failure are well presented. The chapter by Todd and Drummond on cerebral protection during cardiopulmonary bypass by Todd and Drummond presents a concise review of this very controversial, but pertinent, area to cardiac anaesthesia. The chapter on myocardial preservation during cardiopulmonary bypass by Lell and Buttner is an up-to-date review of a subject which remains under intense clinical investigation. All the authors should be commended on their compilation of information presented in the chapters in such rapidly expanding areas addressed in this text.

Combined with the initial volume on cardiac anaesthesia, this book should be a very high reading priority for students, fellows, clinicians and academicians involved in cardiac anaesthesia as well as other related specialties.

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Pediatric Anesthesia

George A. Gregory. Churchill Livingstone New York (Academic Press Canada) 1983, 2 vol. 1020 pp., \$128.00

Dr. Gregory deserves praise for undertaking the formidable task of compiling this encyclopaedia for paediatric anaesthetists. Its goal is to provide the reader with appropriate information on which to base the care of the paediatric patient, much of which has previously been found widely scattered throughout the medical literature. The two volume format divides easily into two parts. One deals with the background anatomy, embryology, physiology and pharmacology required to understand the differences between adults and children, and the other to their application to the understanding of pathological states and the clinical care of children coming to surgery.

The 23 contributors have provided extensive reviews of their specialist topics, which are individually excellent. The basic functioning of the cardiovascular, respiratory, renal, endocrine and central nervous systems are well described. Although relying to a considerable extent on adult information, the available paediatric data is presented and relevant comparisons drawn. When related sections in the two volumes were written by the same author, they were noticeably complementary: "anaesthesia for congenital heart disease" followed comfortably after the earlier chapter on cardiovascular physiology. It would be difficult

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to find more complete and concise accounts of "temperature regulation" and "anaesthesia equipment for paediatrics" elsewhere, and the concluding chapter on "paediatric intensive care" was especially impressive.

Unfortunately, there is a disturbing imbalance in the length of the text and number of references in each chapter. The "design of the operating room" is dismissed in six pages and nine references without consideration of the special requirements for undertaking organ transplantation or the place of mass spectrometry in a modern high technology area. Conversely, the 78 pages, and particularly the 800 references, devoted to "paediatric intensive care" are well written, but too long. Important topics are often scattered; "malignant hyperthermia" appears in chapters 7, 12, 14, 25, 27 and 28, so producing unnecessary repetition and loss of impact. Nowhere is the management of the diabetic child coming to surgery found, whilst retrolental fibroplasia is described without recommendations for oxygen delivery and the optimal age at which a premature infant should be anaesthetized to avoid this complication.

The overall length of this book precludes reading in its entirety. However, its usefulness as a reference source will be apparent to anaesthetists with many sorts of interests and needs. By no means a practical handbook, the completeness of its updated reviews makes this a book for perusal by the serious reader, whether for exam preparation, background to a research project, or clinical application. The next edition, after the editor has sharpened his pencil, should be excellent.

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Actualités en anesthésie-réanimation 1982 P. Viars. Paris, Librairie Arnette 1982

Ce recueil de 270 pages regroupe les conférences données au département d'anesthésie-réanimation du C.H.U. Pitié Salpêtrière, à Paris en 1981-1982.

Ceux qui réussiront à trouver cet ouvrage y retrouveront des sujets d'intérêt variable pour l'anesthésiste nord-américain.

Les chapitres sont diversifiés, intéressent autant

l'anesthésiste (endorphines et morphiniques, anesthésie pour laser, hypertention péri-anesthésique) que le réanimateur (barbituriques et coma, fatigue des muscles respiratoires, embolie pulmonaire, SRDA-ARDS, hypoxie, hypercapnie sous CPAP).

Certaines revues de sujets n'ont pas la concision à laquelle la littérature nord-américaine comparable nous a habitués (Refresher Courses) mais cet inconvénient devient compensé par la qualité de la recherche bibliographique et la clarté des exposés.

Les progrès de la thérapeutique pharmacologique chez nos collègues d'outre-mer est de nouveau évidente (ex.: lofentanyl épidural), mais en dehors de ce contexte il nous apparaît évident que l'approche des grands sujets diffère peu de la nôtre (ARDS, hypoxémie postopératoire, hypertension), à cause de l'accessibilité à peu près universelle de la littérature médicale.

Certaines communications ont un intérêt de curiosité: ainsi la cholécystite aiguë alithiasique postopératoire et le traitement de l'intoxication au paraquat sont des sujets à peu près absents de notre littérature, sans pour autant diminuer le mérite de leurs auteurs.

Dans l'ensemble, plusieurs chapitres de ce recueil pourront être lus avec profit par l'anesthésiste qui a des difficultés à maîtriser la langue de Shakespeare; en particulier ceux qui revoient un sujet courant en anesthésie et réanimation.

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Principles and Practice of Blood-Gas Analysis A.P. Adams, C.E.W. Hahn, 2nd ed. Churchill Livingstone (New York) (Academic Press Canada). \$26.35

There are in the anaesthetic literature few good monographs on specific topics. Notable exceptions are West's two books on respiratory physiology and pathology. This is a pity because all too often a complex subject is buried in several different chapters of a textbook and becomes all the more difficult to comprehend. This compact paperback is therefore a welcome addition to the anaesthesia bookshelf. It is in its second edition which obviously reflects its success.

Blood gas analysis is one of those topics that it is impossible to know too much about but this slim volume manages to encompass many facets of the subject. Starting with basic principles it continues with a full explanation of all the physical and physiological aspects of blood gas analysis and measurement. There are excellent diagrams and illustrations and the whole approach is refeshingly different from standard textbooks.

This is a book that all anaesthetic residents should have because it is essential reading for the fellowship examination. All anaesthetists would benefit from reading it because it gives a better understanding of a subject that is often poorly comprehended, and it brings together information that is often widely dispersed.

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To make the patient ready for anesthesia: medical care of the surgical patient

Leroy D. Vandam (Editor), 2nd edition. Addison-Wesley, Menlo Park, California, 1984. \$29.95 (US)

A review of the first edition of this book appeared in the May 1981 issue of the Journal. Minor revisions have been made to the nine original chapters including updating of references. The format of the book is essentially unchanged. The addition of fifty pages has permited inclusion of three new chapters on the gastro-intestinal system, the allergic patient and nutritional considerations. In keeping with the philosophy of the earlier edition, the authors are on the staff of the Brigham and Women's Hospital, primarily internists.

The appeal of this book is evident from the early appearance of the second edition. This is understandable as it contains much well selected and presented background medical information for the anaesthetist intent on improving his or her standards of preoperative care. For example, the chapters on liver, kidney, endocrinology and neurologic disease are easy to read and focus on areas of relevant and common concern. An unusual but welcome contribution is an excellent essay on the understanding and management of patients with psychiatric illness facing surgery and anaesthesia. This clear

account should help to minimize the anxiety which often colours physician interaction with these patients

This volume, however, suffers from attempting to interest a wide audience comprising anaesthetists, surgeons and consulting medical specialists. Selecting appropriate topics for consideration in the detail required to satisfy the different individuals is indeed a difficult task. The discussion of malignant hyperthermia, halothane hepatitis and sickle cell anaemia are too basic and the material in the chapters on the heart and circulation and the lungs and respiration is now familiar to most anaesthetists.

The additional material in this edition does not add greatly to the practical usefulness of the book. Duplication occurs where the management of asthma is discussed in the chapter on the allergic patient and in an earlier one. The section on nutritional assessment and support is a timely introduction to an area of increasing interest for anaesthetists but neither it nor the preceding section on the gastro-intestinal system develop clear therapeutic guidelines.

Overall the book achieves its objectives by providing a ready source of medical consultation and focusing the attention of the anaesthetists on the aspect of care.

The information is conveniently assembled in a book both modest in size and cost but most attractively bound and printed. Unfortunately, out of line with the high quality of presentation, are irritating inconsistencies and errors in several reference lists.

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