Book Reviews

Applied Respiratory Physiology 3rd Edition

J.F. Nunn. Butterworth & Co. (Publishers) Ltd., London, 1987. \$77.95. ISBN 0-407-00342-8

I had the pleasure of reviewing the first edition of this book, which I still consider to be the finest textbook covering acute pulmonary physiology. My copy of the first edition now has a broken binding, is heavily annotated by rude borrowers and will soon need gum to hold it together. The second edition gained weight (from 900 g to 1100 g), but I am not sure it gained as much substance. The basic physiology was intertwined with a great deal of applied physiology, which made it harder to read. The third edition takes a very bold step, by separating the basic and applied physiology. The first section on the "Basic Principles" is, quite simply, outstanding. With a relaxed style and admirably clear illustrations the essentials of respiratory physiology are presented in under 300 pages. The chapters on gas exchange are particularly good. The second half of the book, devoted to "The Applications," will be more controversial. This consists of a series of essays on subjects as diverse as ECMO and Smoking leaving one wondering what were the criteria for inclusion and exclusion. Further, while they are all readable, some are very much better than others, clearly reflecting the author's own interests. This reorganization has led to a further weight gain (to 1300 g), but the new edition is now so much easier to read that it can be highly recommended to all those who manage acute respiratory problems.

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Pediatric Cardiac Anesthesia

Carol L. Lake (Ed.). Appleton & Lange, Norwalk, Connecticut, 1988. \$86.45. ISBN 0-8385-7783-0

This multi-authored text is a welcome addition to and fills a void in the subspecialty of paediatric anaesthesia. Comprised of 22 chapters, the book introduces its topic with an excellent overview of the embryology and pathophysiology of abnormal cardiac anatomy. Other topics covered include reviews of: preoperative evaluation; cardiac catheterization; angiography and interventional techniques; perioperative management; monitoring; pharmacology; extracorporeal circulation; myocardial preserva-

tion and postoperative intensive care. Additionally, the surgical medical and anaesthetic management of specific lesions are discussed in detail in individual chapters.

The book emphasizes a multidisciplinary approach as many of the authors are also specialists in fields other than anaesthesia. This adds a great deal of strength to the book as it avoids dogma to a great extent, and provides more than enough information on each individual lesion that the practitioner is able to develop an anaesthetic technique he is comfortable with.

Several chapters fell short of my expectations. The chapter on monitoring did not emphasize the potential sources of error of some of the monitoring techniques (e.g., end-tidal CO₂ monitoring) in the various types of lesions. The chapter on extracorporeal circulation does not adequately address common paediatric concerns such as deep hypothermic circulatory arrest and cerebral protection. It should also be pointed out that many of the illustrations, although anatomically accurate, frequently provide little pathophysiological information.

The book is lucid, easy to read and generally well illustrated. It provides a great deal of current information and will provide an excellent addition to personal and departmental libraries.

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Preanesthetic Assessment 1

Elizabeth A. M. Frost (Ed.).
Birkhauser Boston Inc., 1988. pp. 320.
\$34.50 (us) Hardcover. ISBN 0-8176-3376-6

Since 1985, a popular education series for clinical anaesthetists using the common theme of preanaesthetic assessment has been published in *Anesthesiology News*. Under the editorship of Dr. Frost of the Albert Einstein College of Medicine in New York, both staff and resident anaesthetists have produced monthly articles for this successful CME program. The first 26 lessons have now been gathered together in book form with the result that a wide range of topics is covered. Each chapter deals with a specific topic in the form of a patient with a particular problem and is prefaced with a brief illustrative case history. Examples include such familiar topics as "The Patient with Known or Suspected Malignant Hyperthermia" or "The Trauma Patient" as well as more specific

topics as "The Patient with Juvenile Laryngeal Papillomas" or "The Patient with Sleep Apnea." Some unusual topics include "The Patient with Trigeminal Neuralgia" and "The Patient with Snakebite." The quality of the articles, which average ten pages, is generally very good and, interestingly, each chapter has been reviewed by an expert, usually outside of anaesthesia. The chapters are well-referenced and are reasonably up-to-date. In particular, the chapter on AIDS is well-done. Finally, each chapter has an associated post-test which is useful. Overall, I feel this text accomplishes its aim of providing "a convenient, practical reference source for clinicians and those studying for examinations."

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Risk and Outcome in Anesthesia

David L. Brown (Ed.). J. B. Lippincott Company,
Philadelphia, 1988. pp. 432. \$49.50 (US)
ISBN 0-397-50794-1

"So what do we really know?" This question, so often expressed in rounds or morbidity conferences, is the impetus behind the first edition of this remarkable new textbook. While the unfortunate answer is too often "very little," this book acts as an excellent repository for what is known about the risks associated with anaesthesia and the outcomes measured from our care. Through exhaustive references it takes each of the anaesthetist, the surgeon, the consulting physician, and the concerned patient into the "big picture," and provides the available information necessary to consider effectively all elements of comprehensive patient care.

The introductory chapter provides an excellent perspective of anaesthetic risk through the years, and emphasizes our need to add specificity to the term "anaesthetic risk." The second section correlates anaesthetic decision making with organ system pathophysiology, while the third analyses patient outcome by specialty areas within the practice of anaesthesia. The final chapter relates experience with medical-legal outcomes and offers useful information to minimize the modern-day risk. While multiple-authored, the contributors are all acknowledged authorities in their fields, and have admirably followed the guidelines for presentation of their material.

Unfortunately this book falls short of its title's goal of answering all questions concerning risk, basically because of lack of data. This shortfall is often masked by expressions of outcomes from various surgical treatments of specific diseases, without delineation of the role of

anaesthesia. Alternatively the role of certain anaesthetic procedures is advocated as dogma, without critical appraisal of their value to patient outcome – cited examples are pulmonary artery catheterization, or certain aspects of intensive care medicine. For the most part these authors have identified those questions, and should stimulate a broader approach in anaesthetic research in the future. If so successful, the subsequent editions of this textbook should be even more valuable than the first.

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A Tribute to Professor Sir Robert Macintosh for his 90th Birthday

W.D.A. Smith and G.M.C. Paterson (Eds.).
Royal Society of Medicine, London, 1988. pp. 40.
£7.95 Hardback. ISBN 0-905958-63-2

In October 1987 the Section of Anaesthetics of the Royal Society of Medicine held a meeting to honour Sir Robert Macintosh on the occasion of his 90th birthday. Tributes were recorded by his former associates, and by his two successors to the chair, in the Nuffield Department of Anaesthetics at Oxford. Each speaker covered a different aspect of Macintosh's contributions to anaesthesia. These included the teaching of good clinical principles, promotion of regional anaesthesia, fostering scientific research and challenging dogma, design of simple and safe equipment, and publication of clearly written and well illustrated texts. The tributes reveal a man of great perception who was not only a sound teacher, but also an ambassador for anaesthesia throughout the world when our specialty was in its infancy, and who continues to be held not only in high respect but in warm affection. This short book is hard-bound in Oxford blue with gold lettering. It is a pleasure to read, full of interest, and gives us some appreciation of how much our profession owes to Sir Robert Macintosh.

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L'infection en réanimation

Sous la direction de B. Regnier et Ch. Brun-Buisson.
Masson, Paris, 1988. pp. 288. 250 F prix T.T.C.
ISBN 2-225-81336-1

Ce livre de 272 pages s'adresse d'abord aux réanimateurs, ceux que nous appelons en Amérique du Nord les coordonnateurs d'unités de soins intensifs ou intensivis-

tes. Il s'agit d'un livre facile à lire, avec un style assez uniforme malgré qu'il ait été écrit avec la collaboration de 31 auteurs différents. Cinq ou six heures de lecture nous permettent de couvrir les trois parties et l'annexe qui s'intitulent respectivement : épidémiologie-prévention (1ère partie), infections nosocomiales (2ième partie), problèmes thérapeutiques (3ième partie) et recommandations pour la prévention des infections transmissibles (annexe).

Tous les anesthésistes peuvent être intéressés par ce livre, particulièrement par la deuxième partie qui traite des infections nosocomiales dans chacune des spécialités chirurgicales (cardiologie, urologie, chirurgie vasculaire, neurochirurgie, etc.). Nous retrouvons là des types de patients que nous sommes appelés à anesthésier fréquemment et nous comprenons mieux les facteurs de risques et les modalités de traitement de ces infections.

L'annexe est également intéressante en ce qu'elle condense des recommandations précises sur la prévention des infections nosocomiales dans des domaines particuliers comme l'installation d'un soluté, d'une sonde urinaire, d'une voie veineuse centrale, d'une canule artérielle, l'entretien du matériel de ventilation, etc.

Les parties consacrées à l'épidémiologie-prévention et aux problèmes thérapeutiques sont davantage importantes pour les médecins qui se consacrent à la réanimation, à qui s'adresse d'abord le livre. Ils peuvent certainement y trouver des données intéressantes et des modalités de traitement fort utiles.

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Principles of Airway Management

Brendan T. Finucane and Albert H. Santora.
F. A. Davis Company, Philadelphia, 1988. pp. 277.
\$19.95 (us) ISBN 8036-3491-9

The essential purpose of a rotation in anaesthesia for medical students is to gain an understanding and practical experience in airway management. These authors have achieved their stated goal of emphasizing the principles of airway management, and not just the technique of endotracheal intubation.

The emphasis on basic anatomy which is clearly described and illustrated makes this book a useful reference for medical students, residents, emergency physicians and paramedical personnel. Respiratory technologists, ambulance personnel and nurses must often assume responsibility for primary care of the airway at cardiac arrests and for transportation of the critically ill. This text will assist in training these individuals who must

often provide airway management in many of the most difficult circumstances.

The contents are well organized and include some often-ignored aspects of this topic such as sedation techniques and methods of securing a tracheal tube.

Controversial issues such as precautions to prevent transmission of infection and the maximal permissible duration of intubation are discussed. Surgical approaches to an obstructed airway such as retrograde catheter placement and needle cricothyroidotomy are described; however, the authors do not provide the inexperienced reader with the benefit of experience with these techniques.

This text provides a well-written summary of the basic elements of airway management and is a useful guide to the training of all health care personnel.

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Manual of Cardiac Drug Therapy. Second Edition

M. Gabriel Khan. Bailliere Tindall, London, 1988.
\$34.50. ISBN 0-7020-1266-1

This is the second edition of this single-authored book. It is a current, concise appreciation of the clinical pharmacology and application of the various agents used to treat cardiac and cardiovascular diseases. It contains a wealth of information that is in part theoretical but mostly very practical. Treatment regimens are based on extensive reviews of the worldwide literature until 1987.

The chapters deal with either a group of drugs (e.g., calcium antagonists) or the pharmacological treatment of a given disease state (e.g., hypertension, myocardial infarction etc.). Each drug group is approached to provide a general drug description and information on mechanisms of action, dosage considerations, pharmacological properties, the treatment of specific cardiac conditions, and adverse drug effects and drug interactions. The book refers not only to currently used medications and treatment regimens but also to drugs that may become available in the not-too-distant future. Information is readily available on generic and pharmaceutical trade names, dosing regimens and methods of administration.

This is a very up-to-date, timely and easily portable manual that provides a wealth of information on basic drug pharmacology and the clinical applications of the numerous agents used in treating cardiac and cardiovascular disorders. It is an excellent reference text and would be of great benefit to medical students, interns, acute care residents, and practicing clinical anaesthetists.

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