

## BOOK REVIEWS

Carol A. Hirshman, M.D., Editor

**Risk and Outcome in Anesthesia**, Second Edition. EDITED BY DAVID L. BROWN. Philadelphia, J. B. Lippincott Company, 1992. Pages: 606. \$79.00.

While the title of this book is *Risk and Outcome in Anesthesia*, the broader questions concern the risks of certain medical illnesses and the outcome of patients who undergo selected surgical procedures. The specific anesthetic may not be the significant risk variable or may be only a minor contributor to the outcome of the patient. The crucial question for all anesthesiologists is about which preoperative medical conditions predispose patients to increased intraoperative and postoperative morbidity and mortality. Once these variables are identified, the next step is to decide whether preoperative intervention can reduce these risks and lead to improved outcome.

Unfortunately for the authors of this book and the anesthesia community, risk-outcome studies have not been performed, except in a few instances. Therefore, the authors of this book are forced to lean heavily on weak studies, case reports, anecdotes, and personal experience to draw conclusions about patients' risks and outcomes. Many chapters start with a statement about the paucity of data on that specific topic.

The book is divided into three parts: perioperative risks, perioperative outcomes, and anesthesiologists' risks. The chapters in the first part are arranged by organ systems. Some are excellent, such as the chapter on cardiovascular disease in which some good risk data studies exist. Other chapters are weak and based largely on anecdotal evidence or personal opinion. The second part of the book deals with perioperative outcome, and the chapters are divided into the various subspecialties of anesthesia. Again, these chapters are uneven in quality and content with large amounts of overlap with the first section of the book. Several chapters discuss anesthetic plans for specific diseases based on no data. These sections would be more appropriate in a general anesthesia textbook.

The third section, on risks to the anesthesiologist, deals with the topics of medicolegal, occupational, and substance abuse risks. These chapters are very brief. Except for the occupational risks chapter, these do not add significantly to the nature of the book.

Each chapter contains an extensive bibliography, which is useful as an up-to-date reference source for risk-outcome studies. While the authors ask appropriate and timely questions about risks and outcomes, the lack of good clinical studies severely undermines their conclusions. Although a book on the topic is a welcome addition to our literature, such a book must await clinical studies addressing these issues.

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**A Handbook of Paediatric Anaesthesia**, First edition. BY STEPHEN J. MATHER AND DAVID G. HUGHES. New York, Oxford University Press, 1991. Pages: 304. Price: \$35.00 (soft cover), \$65.00 (hard cover).

With the continued growth of subspecialty training in anesthesiology, the exposure of many anesthesiologists to the practice of pediatric anesthesia continues to decline. Therefore, ready reference texts are required to provide a quick and informative consultation when the general practitioner of anesthesiology is faced with such patients. This is the intention of *A Handbook of Paediatric Anaesthesia*, coauthored by Mather and Hughes. Additionally, they have hoped to provide a

reference text for the resident physician just starting his training in pediatric anesthesia.

Their handbook contains 304 pages and 14 chapters. In addition, three appendices cover frequently needed numbers such as drug dosages and endotracheal tube sizes. The first five chapters address basic principles of physiology, pharmacology, and equipment as they relate to pediatric anesthesiology. These chapters are concise and well written and give a basic review of such principles as they relate to the practice of pediatric anesthesiology. However, this reviewer finds the discussion of vascular access somewhat outdated. In particular, there is reference to the use of the brachial artery for invasive arterial monitoring. Current practice is to avoid its use because of risks of vascular compromise. In addition, the authors of the handbook advise against the use of the femoral vessels for arterial and venous access because of the risks of vascular compromise and/or infection. Such recommendations are outdated, as several recent studies have documented the safety of femoral arterial and venous access even in the neonate. An additional alternative for arterial monitoring in children, not mentioned in the text, is the axillary artery.

The remaining chapters deal with specific clinical scenarios faced in and out of the operating room. These chapters cover a wide range of topics and disease processes. Due to space constraints, information is limited on most topics. However, relevant references are provided for more in-depth reading.

In summary, the authors have accomplished their intention of providing a quick reference text for the resident physician and those not frequently involved in the practice of pediatric anesthesia. The strengths of the text include its affordable price, clear and concise writing, and compact packaging. Although it is a valuable introductory text, it probably offers little to those involved in the daily practice of pediatric anesthesiology.

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**Researches Practical and Physiological on Etherization**. BY N. PIROGOFF. TRANSLATED BY B. RAYMOND FINK. Park Ridge, Illinois, The Wood Library-Museum of Anesthesiology, 1992. Pages: 76. Price: \$12.00

This book has a unique and international pedigree. In 1847, within a few months of the American invention of anesthesia (by W. T. G. Morton in Boston), a Russian (Nikolai Pirogoff, Professor of Surgery in St. Petersburg) wrote—in French—of his practical and physiologic researches into ether anesthesia. Pirogoff's French text has been translated into English by B. Raymond Fink, the distinguished American anesthesiologist and historian who, for good measure, has included an account of Pirogoff's life and work written by Ole Secher, the doyen of Danish anesthetists.

Pirogoff heard about ether anesthesia 6 weeks after its first use in Britain; later he was to hear of Simpson's discovery of chloroform within just 2 weeks of its introduction in Edinburgh. This should not surprise us since St. Petersburg was then the capital of Russia and also was an important academic center, many of whose citizens made themselves aware of events in other countries. Earlier, in 1846, Morton's agent in Boston had petitioned the Tsar to patent ether anesthesia in Russia; in 1880, it was from St. Petersburg that Klikowich first suggested

the inhalation of nitrous oxide for obstetric analgesia. In no way was Pirogoff in a cultural backwater.

He was quick off the mark and within a few weeks recorded, in this book, his experiences of ether anesthesia and the results of the series of animal experiments that he performed to shed light on ether's mechanism of action. On the basis of these he devised an inhaler for ether and also suggested, and used, warmed ether vapor *per rectum* for anesthesia in clinical practice. Soon afterwards, Pirogoff gave a brief account of this in a British journal of medicine, but his work passed unnoticed in the United States, and his method was not adopted in either country.

The Tsarist Russia in which Pirogoff lived was already a disrupted and unstable society, moving (imperceptibly in 1847) toward the Revolution of 70 years later. There was little point in publishing this book in his native language, which was scarcely used outside its own country, and since, like most well-to-do Russians of his day, Pirogoff spoke French, his alternative was literally to hand. At the time, recognition by the academies of Paris, then at its zenith as continental Europe's cultural and scientific center, was highly prized. (In passing, this also was sought by other pioneers of early anesthesia, such as the English Hickman and the Americans Wells, Jackson, and Morton. Unlike these

others', Pirogoff's work needed official approval, by the Tsar's Censorship Committee, before it could be published.)

The work of Secher (who in 1984 brought about the facsimile republication of Pirogoff's original French text) and that of Fink (who now has freely translated this into English, sensitively combining his knowledge of the languages with his specialist understanding of anesthesia and its history) has resulted in this excellent volume—which would be approved, unhesitatingly, by the most rigorous of censors. It is of considerable historical significance and will enable English-speaking researchers to study Pirogoff's frequently cited (but relatively unfamiliar) work at first hand and in detail.

Historically, it is a paradox that two of the earliest texts on ether anesthesia should have emanated not from the country of its birth but from Russia and Britain—in 1847, no less than 4 years before the first American textbook on the subject appeared. It is difficult to understand why the first American textbook on anesthesia has not yet appeared in a similar, facsimile form.

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**Books Received but Not Reviewed: July 1991 to June 1992**

Title & Edition	Author/Editor	Publisher: Address, Name	Date	Pages	Price (\$)
<b>Neuroanesthesia: Handbook of Clinical and Physiologic Essentials, 2nd Edition</b>	Newfield, P., Cottrell, J. E.	Boston Little Brown	1991	458	50.00
<b>The Effects of Anesthetics upon Cerebral Circulation and Metabolism</b>	Madsen, J. B., Gold, G. E.	New York Springer-Verlag Wein	1990	160	49.00
<b>A Rational Basis for Anesthesiology</b>	Del Santo, G.	Padua, Italy Pican Nuova Libreria	1990	933	
<b>Approach to Pulmonary Disease in the Immunocompromised Host</b>	Tenholder, M. F.	Mount Kisco, NY Futura	1991	338	79.00
<b>Patient Care in Colorectal Surgery</b>	Beck, D. E., Welling, D. R.	Boston Little, Brown	1991	351	42.50
<b>Transesophageal Echocardiography</b>	Clements, F. M., deBruijn, N. P.	Boston Little, Brown	1991	163	95.00
<b>Pain and Central Nervous System Disease: The Central Pain Syndromes</b>	Casey, K. L.	New York Raven	1991	304	92.00
<b>The Surfactant System of the Lung</b>	Cosmi, E. V., diRenzo, G. C., Anceschi, M. M.	London Macmillan	1991	333	83.43
<b>The Critical Care Drug Handbook</b>	Zaloga, G. P.	St. Louis Mosby Year Book	1991	537	24.95
<b>Arrhythmia—a Guide to Clinical Electrocardiology</b>	Sandoe E., Sigurd, B.	Bingen, Germany Publishing Partners Verlags GmbH	1991	375	105.00
<b>Trauma Anesthesia</b>	Stene, J. K., Grande, C. M.	Baltimore Williams & Wilkins	1991	510	75.00
<b>Implantable Drug Delivery Systems</b>	Laffer, U., Bachman-Mettler, I., Metzger, U.	Basel, Switzerland Karger	1991	68	32.00
<b>Drug Therapy for Headache</b>	Gallagher, R. M.	New York Marcel Dekker	1991	312	79.75
<b>Semigroup Algebras</b>	Okninski, J.	New York Marcel Dekker	1991	376	99.75
<b>Die Behandlung des Brandverletzten Ein Interdisziplinäre Aufgabe</b>	Balogh, D., Mehrkens, H. H., Muller, F. E.	Vienna Verlag Wilhelm Maudrich	1991	112	35.65
<b>Hämodynamik, extravaskuläres Lungenwasser und Gasaustausch im septischen Schock unter differenzierter Volumtherapie</b>	Zabrobilek, E.	Vienna Verlag Wilhelm Maudrich	1991	134	31.11
<b>Principles of Critical Care: Pretest, Self-Assessment and Review</b>	Hall, J. B., Schmidt, G. A., Wood, L. D.	New York McGraw Hill	1991	239	138.00
<b>Year Book of Anesthesia 1991</b>	Miller, R. D., Kirby, R. R., Ostheimer, G. W., Roizen, M. F., Stoelting, R. K.	St. Louis Mosby Year Book	1991	398	57.95