

# Book Reviews

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**Manual of Pediatric Anesthesia.** BY DAVID J. STEWARD. Toronto, Churchill Livingstone/Medical Division of Longman, Inc., 1979. Pages: 305. Price: \$15.95.

There is a need for a manual of pediatric anesthesia. Dr. Steward's manual outlines anesthetic management, with contributions from the staff members of The Hospital For Sick Children, Toronto, Canada.

The book is divided into three parts, a section that details important differences between children and adults, a brief discussion of the general principles of pediatric anesthesia, and specific techniques of anesthesia. There is an update review of neonatal respiratory physiology, with ample discussion of the specific anesthetic requirements of the neonate and premature. The problem of malignant hyperpyrexia and its treatment is particularly well examined. In the section dealing with the anesthetic management of surgical diseases, the pathology is covered, and specific details of anesthesia, preoperatively, intraoperatively, and post-operatively are clearly outlined, including details as to the length of stay in the recovery room.

The manual is written in readable style with pertinent, recent references. Key articles on each topic are emphasized. It is unfortunate that controversial techniques are presented as routine—direct intracardiac injection of drugs during cardiac resuscitation; intravenous induction for infants using a syringe and 27-gauge needle—neither of which is standard practice in the United States.

A major drawback of the book is inadequate cross-indexing. For instance, a very complete and informative list of syndromes and associated anesthetic complications is presented in the text. However, a syndrome as common as Down's is not found under this name or under trisomy 21 in the index. One must be acquainted with the manual to realize that Down's syndrome is included in the syndrome Appendix I.

In summary, this is a well written, needed manual, of value to house staff and practitioners alike. It is hoped that in the next edition the index can be improved, so that it can more readily serve for rapid reference.

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**Clinical Application of Respiratory Care.** BY BARRY A. SHAPIRO, RONALD A. HARRISON, AND CAROLE A. TROUT. Chicago, Year Book Medical Publishers, Inc., 1979. Pages: 578. Price: \$19.50.

A highly trained anesthesiologist who specializes in ventilatory support and respiratory care may see this book as overly simplified and lacking in depth. Such an opinion, however, would miss the point that it is intended primarily for respiratory therapists, nurses and physicians, who are responsible for the care of patients with respiratory insufficiency, yet who may not have received

in-depth training in this area. In this regard the authors have succeeded in masterful fashion.

The book is divided into eight sections containing 34 chapters. The sections include foundations of respiratory care (cardiopulmonary anatomy and physiology, mechanisms of breathing, evaluation of pulmonary function); oxygen therapy; bronchial hygiene therapy (humidification, nebulization, aerosol therapy); airway care (tracheal intubation, tracheostomy); clinical assessment of acute respiratory failure; airway pressure therapy (mechanical ventilation, IMV, PEEP-CPAP); cardiovascular monitoring and supportive therapy; and common pulmonary pathology in acute respiratory care.

The five chapters discussing airway pressure therapy are the most complete and comprehensive that I have seen in any clinically oriented textbook. Terminology is well defined and the overall physiologic impact of mechanical ventilation and other forms of airway pressure therapy is handled with great skill. Sections dealing with intermittent mandatory ventilation (IMV) and PEEP-CPAP are particularly worthy of note.

Chapter 10, IPPB therapy, is the most objective and reasoned approach to the subject which I have read. While freely acknowledging the abuse that has been accorded this form of support, the authors nevertheless avoid the almost hysterical attacks which have been heaped upon it. They point out the inconsistencies of many studies which purport to demonstrate a total lack of efficacy and suggest specific areas in which it may be effective when properly applied and supervised.

There are some weaknesses. The entire section on pediatric respiratory care comprises slightly less than nine pages, although occasional references to this subject appear elsewhere in the text. Considering that major advances in respiratory care had their origins here, more in-depth coverage is advisable. Chapter 18, "Defining Acute Respiratory Failure," struck me as sophomoric and redundant. Occasional lapses in terminology such as "pulmonary epithelium" (tracheal?, bronchial?, alveolar?) occur but are rare. A more in-depth consideration of chronic obstructive pulmonary lesions might be desired by those who deal with such entities, particularly since the authors note some 15,000,000 Americans are afflicted. Commonly employed symbols are frequently misused, e.g.,  $V/Q$  and  $Q_2/Q_1$  rather than  $\dot{V}/\dot{Q}$  and  $\dot{Q}_2/\dot{Q}_1$ , respectively.

All in all, however, these "faults" do not detract significantly from the overall superior quality of this book. Illustrations are excellent and to the point. The cited references encompass most of the pertinent work in respiratory care of the past decade, and a number of classic works are also included. Medical students, nurses, respiratory therapists, anesthesiology residents and clinical practitioners will all benefit from reading the material contained herein. Even experts in the field will be surprised at the "pearls" that may be gleaned from this book.

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