

which, overall, is very good, there is no reference to laryngotracheobronchitis and only a brief description of epiglottitis. The comment is made, with reference to aspiration pneumonitis, that "... general anesthesia is of greatest risk when surgery involves the upper abdomen or the central nervous system, or is an emergency procedure involving trauma or obstetrics." In discussing therapy of this disorder, PEEP is not highlighted relative to other options. Probably due to the time when the manuscript was prepared, there is no mention of AIDS and related pulmonary infections, although the importance of immunosuppression is well described.

The chapter on Management of Surgical Patients with Respiratory Disease is disappointingly brief and completely omits the special problems that may occur following thoracic surgery. Neither this chapter nor the one on Diseases of the Pleura describes the intricacies of thoracostomy drainage systems. In the discussion of empyema, I could not find reference to bronchopleural fistula or to lateral thoracoplasty, nor was there a description of the significance of a radiographic air-fluid level in association with pleural effusions (mentioned briefly in the chapter on Chest Radiology). The final chapter on Acute Respiratory Failure is brief and does not meet the needs of the anesthesiologist.

In summary, a remarkable amount of material has been crowded into this text which, in its first edition, is somewhat patchy in content. While it provides considerably more information than is available in standard texts of general medicine, it may not satisfy the appetite of the pulmonary specialist.

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Perspectives in High Frequency Ventilation. EDITED BY P. A. SCHECK, U. H. SJOSTRAND, R. B. SMITH. Boston, Martinus Nijhoff, 1983. Pages: 329. Price: \$54.50.

This book is not a primer or handbook of high-frequency ventilation. As the title implies, it represents an amalgam of current advanced thought on the subject.

The text is a collection of the 40 papers presented at an international symposium held at Erasmus University, Rotterdam, The Netherlands, in September 1982. The actual typewritten texts submitted by the authors simply have been reproduced. The reader therefore must tolerate numerous typographic errors and a few mislabeled charts. One author's charts are not included (perhaps at the conference they were projected). The cover-to-cover reader will become weary encountering the same basic introductory remarks over and over again. European authors personally have translated their works into English; this leaves some of the reading difficult to follow. The book's most

intriguing idea, "pneumatic controlled circulation," is, for example, all but lost in a meandering paper that never gets around to presenting any pertinent results. The ordering of papers is organized only roughly; the novice should first read the thirty-third paper! This gives the only true introduction to an overview of the field.

The substance of the book has five main divisions. The papers dealing with theory attempt to explain why high-frequency ventilation works. Ideas about gas transport and diffusion are explored, but the average clinician will find the mathematics burdensome. Nonhuman experimental models are used in another series of papers aimed at solving these same problems. The technical papers show nicely how gas administered at high frequency can be humidified adequately, how tidal volume can be determined cleverly even at 15 Hz, how the various high-frequency modes can be mixed to achieve certain effects, and how the single universal ventilator may soon be feasible. The best-founded papers are those that describe how high-frequency ventilation has been employed to advantage in laryngotracheal and pulmonary surgery, even when lasers are used. The last set of papers deals with the use of high-frequency ventilation in the critical care setting. The notions that high-frequency ventilation interferes less with cardiac performance and causes less barotrauma are refuted seemingly by the clinical data presented. The only randomized clinical trial could demonstrate, as the authors choose to put it, "no advantage of conventional over high frequency ventilatory techniques." Another group of authors is oddly enthusiastic about high-frequency techniques, even though, after transient improvement, 13 of their 15 patients died in respiratory failure.

In general, little is written here about high-frequency oscillation but more about high-frequency positive-pressure ventilation and jet ventilation. A number of interesting applications of high-frequency ventilation are proposed or reaffirmed, including its use: in the presence of bronchopleural fistulas; as a well-tolerated device for weaning; as a handy aid in mobilization of secretions; as an effective mode for ventilation and even delivery of medications during cardiorespiratory arrest; and as a possible method for long-term cuffless transtracheal ventilation.

This book is required reading for those developing and using high-frequency ventilators. The information aimed at those in anesthesia is well presented and helpful. The average intensivist will find much of the book tedious. For the specific setting of critical illness, this volume shows very clearly where we will go next with high-frequency ventilation, but it is not persuasive in explaining *why* we should be heading in that direction.

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