Textbook of Critical Care. 2nd Edition, The Society of Critical Care Medicine. EDITED BY W. C. SHOEMAKER, S. AYRES, O. GRENVIK, P. R. HOLBROOK, and W. L. THOMPSON. Philadelphia, W. B. Saunders, Pages: 1519. Price: $99.00.

The second edition of **Textbook of Critical Care** has been greatly expanded over the first edition, which was the first major textbook devoted to the discipline of critical care medicine. Like the first edition, this book attempts to appeal to a wide variety of individuals involved in both adult and pediatric intensive care, including physicians, as well as respiratory therapists, critical care nurses, and other intensive care unit (ICU) technical personnel. As an anesthesiologist practicing and teaching critical care with primary patient responsibilities, I found that the book offers some very interesting and useful information along with information that is less practical and less useful. The organization of the book is somewhat chaotic, and it is therefore difficult to read. As one would expect with a multi-author/multi-editor book, some chapters are superb, whereas others left me wondering why they are included in the first place.

The book is divided into thirteen sections. The first deals with resuscitation. The history of critical care is presented with an emphasis on contributions from Southern California. The chapter on cerebral resuscitation is an excellent state-of-the-art review of this field. The chapters on newborn resuscitation, drowning, and transport all are excellent. In this section, there are two separate chapters on mechanisms of perfusion with cardiopulmonary resuscitation (CPR). It still isn't clear to me why two chapters on this topic are needed and why they appear in different parts of the section. The section also deals with hypothermia and malignant hyperthermia, but not with other causes of hyperthermia. Information on heat stroke cannot be found anywhere in the book. Included in this section is an entire chapter devoted to the use of clinical algorithms in emergency resuscitation. I have trouble with the use of figures that require one and a half pages of legend to describe. I also have trouble with the use of logic trees, which are emphasized here and elsewhere in the book, to teach clinical medicine. I have no doubt about their usefulness in the development of artificial intelligence systems, but I do not find them a useful educational tool, since they require a rigid adherence to a cookbook-style recipe. Three of them refer the user on to the Respiratory Protocol and to Head Injury Protocol, which are not included.

The second section, on monitoring, is quite long and mixes useful information on accepted monitoring techniques with chapters on techniques that have not received wide acceptance. It is not always possible to tell which is which merely by reading the book. For example, the chapter on noninvasive cardiac output measurement leaves the reader thinking that these techniques are accurate and reproducible and should be in use across the country. The fact that they are not is not dealt with by the author. It was hard to tell why a chapter on preoperative assessment of high-risk patients is in the monitoring section. Nevertheless, it contains useful information. The chapter on new chemical sensing techniques is again one in which there is considerable speculation, but little practical information, about the use of this techniques. Strong points of this section are the chapters dealing with pediatric monitoring, radiographic monitoring, and computers. In another mysterious organizational decision, the editors placed the fine chapter on the interpretation of arterial blood gases as the final chapter in the section.

The next section is entitled Cardiovascular and deals with a number of important circulatory issues. There are excellent reviews of cardiovascular physiology, electrocardiography, and the management of hypertension in adults and children. A major disappointment for me in this section is that the problem of hypotension and shock is not addressed in an organized manner. That topic is left to a later section, entitled Pansystemic Illness. The intraortic balloon and left ventricular assist devices are presented in this section just before a three-page chapter on the use of sympathomimetic amines in the treatment of shock. One of the bright sides in this section is the superb chapter on acute myocardial infarction.

Section 4 is entitled Pulmonary, and begins with excellent reviews of anatomy, development, and the respiratory distress syndrome. The chapter on airway pressure therapy is very good and is complemented by additional chapters on high-frequency ventilation, mandatory minute ventilation, the hemodynamic effects of artificial ventilation, and the physiologic effects of respiratory therapy. The pediatric chapters in the section are also quite good. There is redundancy in this section, however. There are three separate chapters on adult respiratory distress syndrome (ARDS) as well as one on pulmonary edema; these frequently overlap in content and vary considerably in style. The only major disappointment to me in this section is that there is not a chapter dealing with specific respiratory therapy equipment available in 1990. Despite these problems with the section, this is one of the finest sections of the book.

Section 5 is entitled Visceral Dysfunction. It begins with a well-written chapter on liver disease, is followed by two chapters on gastrointestinal hemorrhage. Each chapter on gastrointestinal hemorrhage again contains similar information presented in different styles. The section then deals with acute renal failure, with a chapter on pathophysiology and diagnosis, followed by a chapter on renal failure in children. Dialysis is discussed in the chapter on pediatrics but not at all in the discussions of renal failure in the adult. The many routes and types of dialysis and ultrafiltration procedures are important aspects of critical care medicine, but are only briefly mentioned in the chapter on pediatrics. A chapter dealing with the management of renal failure in the critically ill adult seems to me to be a serious omission. The final chapter of the section is a review of endocrine problems in the ICU. This is a very good review, but it is difficult to see why the editors devote 31 pages to unusual endocrine problems but not address the treatment of renal failure in adults. The section omits other visceral problems, such as intestinal ischemia and ileus, and provides only one paragraph of information on the prevention of gastrointestinal bleeding in the critically ill.

Section 6 is a long section dealing with infections, hematology, and oncology. The chapters on infections are excellent and contain up-to-date information on antimicrobial therapy as well as good chapters on nosocomial infections and problems of acquired immunodeficiency syndrome (AIDS). The chapter on bleeding disorders is good, but focuses upon medical diseases that lead to bleeding and does not deal extensively with the problem of the postsurgical patient who is bleeding. Some of this latter topic is covered in the chapter on component therapy, as well as in a long chapter on surgical hemostasis in the trauma section later in the book. The chapters on tumors and bone marrow transplantation are useful reviews. Hidden in this section is a chapter on thrombolytic therapy of myocardial infarction, which covers material similar to that in the chapter on acute myocardial infarction in the cardiovascular section.

The next section is entitled Pansystemic Illness. It is here that one finds the chapters on shock that appeared to be missing from the section on circulation. The first chapter, on pathophysiology, presents the subject in a standard manner, but then moves into outcome prediction based upon physiologic parameters. This is a somewhat confusing approach, presented with numerous figures depicting physiologic events in survivors and nonsurvivors. Explanations of therapy are based on decision trees that attempt to maintain patients in an ideal physiologic state. There also are chapters on toxic shock and anaphylaxis and a superb state-of-the-art review of septic shock. There is a good review of fluids for resuscitation and a chapter dealing with nutritional management. Also tucked away in this section is yet another chapter dealing

with increased lung permeability and a brief review of Reye's syndrome. There also is an excellent chapter on electrolyte and acid–base problems.

Section 8 is entitled Therapeutics, and deals first with pain management and sedation in the ICU. The section then deals with poisoning, pharmacokinetics, and finally, opioids. The next section is on trauma and ranks with the pulmonary section as among the finest in the book. There is little redundancy, and each chapter provides a state-of-the-art type review of an individual area. After a great introduction to the topic, the next chapters deal with head injuries, burns, and hemostasis. There also is an excellent review of the acute abdomen.

Section 10 deals with transplantation and is quite straightforward. There is a preliminary chapter on kidney transplants, followed by liver, heart, and heart–lung transplantation. Bone marrow transplantation is covered again, but single lung transplants are not. Section 11 is entitled CNS, and begins with a well-written chapter on critical care neurology, followed by a chapter on monitoring. Material appearing in the chapter on intracranial pressure monitoring in the section on monitoring is repeated in this chapter in a section on intracranial pressure monitoring. There is a good chapter on cerebrovascular disease, followed by several on brain death and on withdrawing life support. There is an excellent review of psychiatric problems in the ICU, followed by a review of the problems that the ICU presents to families and ICU workers.

Section 12 is a very brief section on nursing. It may be useful only for a physician interested in knowing some aspects of critical care nursing. I doubt that it provides much new information for an ICU nurse or manager. Section 13 is entitled Organization, and begins with a discussion of the neonatal ICU and two chapters dealing with the concepts of severity-of-illness indices. The final two chapters of the book easily could have been the first two, since they deal with outcome prediction and economic considerations. These are extremely important chapters, which will have great importance in how we use critical care resources into the 21st century.

The index is useful and works well. References are very up-to-date and heavily emphasize literature of the past 20 years, for obvious reasons. Copy-editing and production of the text is good. There were surprisingly few annoying typographic errors. The binding held up well over several weeks of opening and closing.

The second edition of **Textbook of Critical Care** was an ambitious undertaking that has resulted in a comprehensive textbook of critical care medicine, but the book is not without its problems. It contains many state-of-the-art reviews of important topics in critical care that ordinarily cannot be found in a central source such as this. The redundancy of information is a problem for me as a reviewer since the same topic appears in different locations for different reasons. I believe that the book could be improved by some careful planning and vigorous editing of the chapters. I also found that the integration of pediatrics throughout the text is somewhat awkward, and that for the next edition consideration should be given to a section devoted to pediatrics and neonatology or a separate text. Despite my criticisms, no other textbook deals with the entire spectrum of critical care, and I expect we will continue to see future editions of this book.

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Basics of Anesthesia. 2nd Edition. BY R. K. STOELTING and R. D. MILLER. New York, Churchill Livingstone, 1989. Pages: 523. Price: $32.95.

The first edition of **Basics of Anesthesia** appeared in 1984 and proved a worthy competitor to the venerable **Introduction to Anesthesia** by Dripps, Eckenhoff, and Vandam. Since then, the field has enlarged to the point where the authors have prepared a second and larger edition. In their preface, Stoelting and Miller state that "the book still remains, in our opinion, the most concise presentation of essential information for the practice of anesthesiology available to the trainee and the practitioner."

In reading over their book, I found a wealth of information, most of it concisely and articulately presented. Indeed, when compared to the ponderous three-volume reference text, **Basics of Anesthesia** deserves its nickname, "Miller Lite."

Basics of Anesthesia is organized into five main sections. The first, History and Scope of Anesthesia, is a concise and fact-filled summary of the history and scope of our specialty. In particular, there is a splendid table of historic milestones that the resident and experienced practitioner will appreciate and refer to again and again. The second section, Pharmacology, contains a wealth of information about the agents we use in practice. However, I felt that the discussion of uptake and distribution was confusing and would be difficult for a novice to follow. Also, rather than use appropriate subscripts, *i.e.*, P_A and P_I consistently in their discussion, the authors used the terms PA and PI, which are nonstandard and confusing, especially since PA is the usual abbreviation for pulmonary artery. I suspect that this may be a typographic error. On the other hand, the presentations of pharmacokinetics, neuromuscular blockers, and the autonomic nervous system are superb. The authors include a marvelous schematic diagram of a transmembrane signaling system that is a model of clarity.

Section 3 addresses Preoperative Preparation and Intraoperative Management. The presentations, for the most part, are clear and concise. However, there are occasional areas in which the information is incomplete, and the resident will often want to go beyond this text for more definitive information. Toward this end, each chapter contains a well-organized reference list, containing both classical and current articles.

Section 4, Special Anesthetic Considerations, contains excellent presentations of specialty areas such as cardiac disease, pulmonary disease, obstetrics, and pediatrics. The section on renal disease is particularly good. However, the experienced anesthetist will again wish to go beyond these discussions for more definitive presentations.

Sections 5 and 6, which deal with the recovery room and consultant practice, are succinct and straightforward.

In summery, it is easy to see why this text is so popular among new anesthesia residents. It is relatively concise compared to the reference texts currently available, is reasonably easy to read, and is quite current. However, I do not find it to be a good reference for medical students unless they are doing a prolonged clerkship or preceptorship, since the book is simply too long and detailed for a week's rotation. Although this text lacks the eloquence of Dripps, Eckenhoff, and Vandam, it is well-organized, amply referenced, and packed with essential material. I highly recommend it for the new resident. The experienced practitioner, however, will probably be better served by such vehicles as ASA Refresher Course lectures and review articles in order to remain current.

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