

REVIEWS OF EDUCATIONAL MATERIAL

Trauma Anesthesia and Critical Care of Neurological Injury. Edited by K. J. Abrams and C. M. Grande. Futura Publishing Company, 1997. Pages: 553. Cost: \$98.00.

Trauma Anesthesia and Critical Care of Neurological Injury is an issue of the Trauma Care Series and includes 18 chapters written by a multiauthor team largely composed of anesthesiologists. This newly written textbook is an interesting attempt to propose a comprehensive and up-to-date review of the emergency and critical care of patients with neurologic injury. This subject is of particular importance because trauma is the leading cause of death in the first four decades of life and is the third leading cause of death overall. Approximately half of these deaths result from traumatic brain injury, which is also a major cause of postinjury morbidity. Historically, the care of patients with traumatic brain or spinal cord injury has consisted of the evacuation of intracranial blood collections and supportive treatment. However, our comprehension of the mechanisms of traumatic brain and spinal injury has evolved rapidly during the past decade. Also, it has become apparent from large epidemiologic studies that the development of systemic arterial hypotension, hypoxia, or both during the early phase after traumatic neurologic injury is an important factor of comorbidity, which strongly affects the survival and the quality of life of these patients.

The scope of this book reaches far beyond the intraoperative management of the patient with head injury because it also discusses important issues regarding prehospital care, transport from a regional hospital to a tertiary center where the definitive care will be provided, immediate resuscitation in the emergency room, and issues of the critical care of those patients, such as monitoring of the brain function, diagnostic evaluation, nutritional support after neurotrauma, rehabilitation of neurologic injuries, and finally brain death and organ procurement.

Some chapters are excellent and include useful tables and figures that summarize well the information the reader needs to know. For example, chapter 1 contains a comprehensive review of the prehospital care of neurologic trauma. Although in many cities of the United States the transport time between the site of the injury and the trauma center where definitive care will be delivered is brief, this is not the case when the injury occurs in a remote location. In this particular situation, the prehospital care becomes critical for the survival of the patient with neurotrauma. To prevent the development of secondary brain injury during the transport of the patient to the hospital, several therapeutic strategies have been developed that are well summarized in the chapter written by Norwegian colleagues who have extensive experience in these issues. Also, the last chapter provides an excellent overview of the difficult problems facing the critical care physician making the diagnosis of brain death and dealing with organ procurement. In particular, this chapter discusses some of the confounding factors that may make the diagnosis of brain death difficult and proposes clear guidelines to keep the different organs alive after the patient has been declared brain dead.

Despite these excellent features, my enthusiasm is moderated for the following reasons. First, some chapters (e.g., chapters 3, 12, and 13) that review important questions regarding initial resuscitation, perioperative management, and critical care of patients with neurologic injury do not contain any figures or tables that would summarize the

problems discussed in the text. Also, the summary of those chapters does not provide listings of the guidelines discussed in the text of the particular chapter. Second, there is some unnecessary repetition of the information offered to the reader (e.g., chapters 3 and 4) that could have been prevented by better coordination in editing this textbook. Third, the lengthy description of different techniques of regional anesthesia in chapter 17 is out of context and should have been omitted. Finally, in some chapters (e.g., chapters 15 and 16), it would have been useful to have tables summarizing the contents of these chapters and indicating the opinions of the experts regarding new techniques of monitoring and new modalities of treatment for patients with traumatic neurologic injury.

Despite the weaknesses summarized, this textbook consists of a number of superb and innovative chapters that discuss some important areas of the care of patients with traumatic neurologic injury. Therefore, this textbook may be a valuable reference for anesthesiologists who commonly or occasionally manage traumatized patients with neurologic injury, although its price (\$98.00) may be high to young physicians with limited financial resources.

Jean-Francois Pittet, M.D.

Department of Anesthesia,
Room 3C-38
San Francisco General Hospital
1001 Potrero Avenue
San Francisco, California 94110
jean_pittet@quickmail.ucsf.edu

Red Cell Transfusion: A Practical Guide. Edited by Marion E. Reid and Sandra J. Nance. Totowa, Humana Press, 1998. Pages: 227. Price: \$99.50.

This monograph, apparently the first one of a new series entitled "Contemporary Hematology," seeks to provide a concise, up-to-date overview of current issues associated with the collection, selection, and transfusion of erythrocytes. The material is organized in 14 chapters with 21 contributors, all (with one exception) pathologists laboratory medicine specialists, or both. The practical aspects of blood collection, donor screening, autologous and directed donations, blood administration, and the immunologic principles of transfusion medicine are discussed in five chapters. These chapters are somewhat scattered through the book, and a better arrangement of sequence would have helped the reader. For instance, donor-related issues are contained in chapter 1, whereas an expanded discussion regarding directed donations is found in chapter 10. The chapter concerning blood group antigen and antibodies is relegated at the end of the book, whereas germane immunologic topics are presented in chapter 3.

Five chapters are dedicated to erythrocyte transfusion in recipients with special needs. The topics include transfusion in autoimmune hemolytic anemias, in the immunocompromised patient, in solid organ transplantation, and in neonates, and long-term transfusion therapy.

The final chapters deal with massive transfusion, the transfusion "trigger," and transfusion reactions. One chapter also deals with the