

Pathophysiology of Shock, Anoxia, and Ischemia. EDITED BY R. ADAMS COWLEY, BENJAMIN F. TRUMP. Baltimore/London, Williams and Wilkins, 1982. Pages: 710. Price: \$75.00.

In the 1960s, R. Adams Cowley, a cardiothoracic surgeon, founded the Shock-Trauma Unit at the University of Maryland, which has remained a unique clinical and research facility for trauma victims. About ten years ago, Dr. Trump, a pathologist, joined Dr. Cowley in research endeavors and focused on problems relating to cellular and subcellular reactions to injury. The principle aim of the facility was to bring together basic scientists and clinical investigators from multiple disciplines to improve our understanding and management of shock and trauma.

The book contains some 49 chapters on all aspects of circulatory shock by leading investigators in the shock field over the last two decades. The stated purpose of the book is to present a comprehensive picture of the pathophysiology and treatment of shock, ischemia, and anoxia as we know it to today. The book certainly accomplishes its purpose. It is divided into four sections, and each section is preceded by an editors' summary of the section. Section 1 is concerned with basic pathophysiology and contains several chapters on cellular injury, metabolic responses, and alterations in the microcirculation. Section 2 is entitled "Shock and Related Phenomena" and contains detailed discussions of hemorrhagic shock, sepsis, and the toxicity of carbon monoxide and cyanide. There are several chapters dealing with the pathology and pathophysiology of specific organs, namely the liver, gastrointestinal tract, pancreas, kidneys, and lungs. The current therapy of shock is discussed and includes presentations on transfusion therapy and plasma expanders. I was surprised that autotransfusion was not mentioned. There are some crystal ball gazing chapters on "Strategies for Future Diagnosis and Therapy." One chapter discusses mathematical models and is clearly unintelligible for those without advanced mathematical backgrounds. Sections 3 and 4 discussed the pathology and treatment of injury to the central nervous system and heart, respectively.

Most, if not all of the discussions are detailed, encompassing, and up-to-date. There are occasional overlaps and repeats of concepts and information as each contributor develops his/her presentation in a particular specific area, but this is to be expected. For the most part, the bibliographies are extensive and current. The book should be in the library of every serious student of shock and trauma, but it is probably too comprehensive and exhaustive for the average physician and resident. It will serve as an excellent reference resource.

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Shock Trauma/Critical Care Manual: Initial Assessment and Management. EDITED BY R. ADAMS COWLEY, M.D., C. MICHAEL DUNHAM, M.D. Baltimore, University Park Press, 1982. Pages: 616. Price: \$85.00.

Although this new book is called a "manual", it is a large book and has the character and appearance of a reference volume. The book is attractively packaged with clear, large print on non-glossy paper. Its 600 pages are particularly well-divided into 12 sections and an extensive appendix. Headings and subheadings are clear and easy to understand. The Contents Section at the beginning makes its unique format easy to follow.

Some areas of the text are better than others, but certain parts of the book are not of interest to the anesthesiologist. The first section on Initial Evaluation and Management of the Trauma Victim is somewhat brief. Pages of cryptic lists such as in Chapter 3, for example, are difficult to read and of limited use to the physician dealing with a sick patient. In the section on Anesthetic Considerations, the authors suggest that blood filters should not be used in trauma patients. I question this practice.

The section on Injury is covered system by system, and makes excellent reading. The chapters are comprehensive but reasonably brief. I especially liked the chapter on head and neck injuries. It would be nice to see some references for some of the statistics quoted. Surgical technique is discussed in some detail in this section.

The section on Systems Failure has all the right titles, but is too brief on some subjects. The chapters on Near Drowning, Hypothermia, and Smoke Inhalation were particularly good. In the same section, a chapter on Alcohol and Drugs is superb. It comprehensively covers many of the drugs encountered, and their interactions. This chapter is of special interest and application to the practicing anesthesiologist.

Sections on Nutrition, Infection, Dying, and Hospital Protocols are all well-written, but are not part of the "initial assessment and management," of the accident patient. These sections are important, but would be better covered in a separate book on secondary care.

Essential techniques and procedures are covered in a separate section. The chapters on P-A lines and CVP lines are too brief, and of very limited value to the anesthesiologist with minimal experience with these techniques.

The section on Hyperbaric Medicine is a pleasure to read. This reflects the bias of the authors, who clearly are involved in this mode of therapy. Unfortunately, this excellent therapeutic option is only available to a few major medical centers. The chapter is comprehensive and would adequately serve as a reference on this topic.

All in all, this book is an ambitious undertaking which largely achieves its aims. However, I would have to conclude that it was not originally intended to be a reference for anesthesiologists, and because of this, would be of limited use to physicians in this specialty. Furthermore, because of its extensive detail in parts, the book is more than a manual, while still being too brief in other parts to be a reference. For the house officer or Emergency Room physician it would prove invaluable, but as a reference rather than an easily transported manual.

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