

BOOK REVIEW

David E. Longnecker, M.D., Editor

Diagnostic Methods in Critical Care: Automated Data Collection and Interpretation. EDITED BY WILLIAM C. SHOEMAKER AND EDWARD ABRAHAM. New York, Marcel Dekker, Inc., 1987. Pages: 502. Price: \$69.75.

This book is the ninth monograph in the "Basic and Clinical Cardiology" series. It is unique within the series in that it deals with a topic other than cardiology. It consists of 15 chapters, written by authors from across the United States who represent a wide range of specialties with relevance to critical care medicine. The emergence of new diagnostic techniques, combined with those previously available, has provided the practitioner with an abundance of data. Properly interpreted, this information can lead to a better understanding of disease and a more sound basis for therapeutic intervention. Methods of monitoring and data interpretation are examined throughout the book; with emphasis on the cardiovascular and respiratory systems. Individual chapters discuss surgical, radiologic, endocrine, immunologic, and pharmacological monitoring. Each monitoring modality is examined in depth and criticized on an individual basis so that it may be utilized in the appropriate manner. The editors express the hope that a better understanding of diagnostic monitoring and data collection will enhance understanding of the disease process, allowing for appropriate management and earlier intervention. In some individual chapters, this goal is achieved, although consistency and conformity are lacking overall.

Topics usually not covered in standard medical texts, such as computerization, real time data acquisition, magnetic resonance imaging, and positron emission computed tomography are briefly presented with enough detail to allow the busy clinician to gain an understanding of their utility in critical care. Chapters vary considerably in style, length, and content. The chapter on cardiac monitoring is excellent. It is well

organized and provides a good discussion on commonly encountered arrhythmias and their treatment. The chapter on pulmonary function is a model chapter for accomplishing the goals of the text. The authors discuss both the serial and the continuous pulmonary physiological measurements that are used in critical care. After basic discussions of arterial blood gases and pulmonary function, the less commonly discussed respiratory monitors are presented, including tests of maximal mechanical ventilatory status, ventilator parameters, oxygen consumption/carbon dioxide production, and endotracheal tube cuff pressures. Two major areas that were omitted included the monitoring of central nervous system control of breathing and the use of pulse oximetry (ear oximetry, which is of historical interest, was discussed in detail). This chapter was, however, well referenced with both classical and current citations.

Three significant areas not included in the book were the central nervous system, the renal system, and the measurement of basic laboratory values. Another area of concern was the obvious lack of editorial control over chapter content and organization. This leads the reader to many difficult transitions between chapters when attempting to read the book in its entirety. The chapters appear to have been "transplanted" from other sources and a strong common theme is lacking.

In summary, although there are several noteworthy chapters and others which provide useful information, the book does not reach the goal of its editors. As a reference text on specific areas of critical care, it is adequate but, in its entirety, it does not provide an easily read or complete text on diagnostic methods for the critical care practitioner.

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Erratum

In the May, 1988, issue of ANESTHESIOLOGY, a Clinical Report (Gibson BE, Wedel DJ, Faust RU, Petersen RC: Continuous epidural saline infusion for the treatment of low CSF pressure headache. ANESTHESIOLOGY 68:789-791, 1988) contains an error in reference 1. Reference 1 should read: Schaltenbrand G: Neuere Anschauungen zur Pathophysiologie der Liquorzirkulation. Zentralbl Neurochir 3:290-299, 1938.