

Book Reviews

Z. Nicholas Zakov, MD
Section Editor

Anesthesia and Neurosurgery, edited by James E. Cottrell and Herman Turndorf (Mosby).

The first edition of *Anesthesia and Neurosurgery*, published in 1980, successfully combined the subjects of basic neuroscience and clinical neuroanesthesia. This second edition seems to have accomplished that and more. Expanded chapters deal with anesthesia for patients with neuroendocrine disease, pediatric neurosurgery, and carotid endarterectomies. New chapters about the physiology of pain mechanisms, the management of both acute and chronic pain, and the complications of neuroanesthesia are well done. The controversial and difficult subject of the role of free radicals and antioxidants in regional cerebral ischemia is clearly written. This reviewer particularly liked the chapter about cerebral aneurysm management, which was divided into three sections (neurologic aspects, anesthetic management, and induced hypotension). The chapter dealing with neurologic intensive care would be useful for physicians involved in the critical care of patients with neurosurgical problems.

Subspecialization in anesthesia is becoming increasingly popular. There are currently about 50 fellowship programs in neuroanesthesia. Texts like *Anesthesia and Neurosurgery* help to stimulate an interest in the subspecialty. This book will serve well as a standard text for both trainees and anesthesiologists interested in neuroanesthesia and is also recommended for any physician managing neurosurgical patients.

ZEYD Y. EBRAHIM, MD

Department of Anesthesiology
The Cleveland Clinic Foundation

The Heart and Cardiovascular System—Scientific Foundations, edited by Harry A. Fozzard, Edgar Haber, Robert B. Jennings, Arnold M. Katz, and Howard E. Morgan (Raven).

This two-volume book presents the current understanding of basic cardiac physiology. It contains reviews of cellular membrane physiology, contractile

function, and cell-to-cell interaction, then relates these to organ-level myocardial-pump and electrophysiologic function. Descriptions of investigative laboratory techniques used are incorporated into many of the chapters, giving a picture of the logic and capability of research. Clinical technologies such as radionuclide techniques, echocardiography, magnetic resonance, and angiography are discussed as tools for the continued study of ventricular function, coronary flow physiology, and cardiac-cell function. The various chapters primarily present the basic science upon which laboratory investigation and clinical and therapeutic study in practice are based.

The scope and detail should make *The Heart and Cardiovascular System* a basic and important reference source for cellular physiologists, clinical scientists, and students of advanced basic science. This is not a text about cardiac disease and thus will be of less immediate use to an active clinical practitioner or house officer. From a clinician's point of view, however, this book presents the material that we all wish we knew better, and having the information in a concentrated, collected, well-written form should make access to these important, fundamental data easier and more likely to be sought out.

DONALD UNDERWOOD, MD

Department of Cardiology
The Cleveland Clinic Foundation

Kidney Transplant Rejection: Diagnosis and Treatment, edited by G. Melville Williams, James F. Burdick, and Kim Solez (Dekker).

This 506-page book is well balanced, well documented, and reasonably up to date. The first third of the text describes the biology of the allograft response; the middle third, the diagnosis of rejection; and the last third, the treatment of transplant rejection with new immunosuppressive agents.

Unfortunately, the book does not begin on a high note. The first chapter, entitled "Proteins and the Molecular Basis of Cell-Mediated Immunity," gives only a paucity of information on the HLA antigens, repeatedly calls β_2 -microglobulin " β_2 -macroglobulin,"

and uses old nomenclature such as "HLA-DS." It also has confusing statements such as, "Success in identifying the T-cell antigen receptor came with the production of monoclonal antibodies but not other T cells." There is no discussion of the soluble form of the interleukin-2 receptor, which has been known for at least two years and has recently been used clinically to evaluate transplant rejection. The strength of the section improves with the rich and classic description of antibody-mediated rejection by one of the pioneers in the area—Henry J. Winn. The chapter about cell-mediated rejection is also good and explores, in a lucid and detailed fashion, what is and what is not known about the cells involved in allograft rejection. Redundancy is a problem in these initial chapters, as exemplified by a description of interleukins, which this reviewer found in at least three different sections. A refreshing change in the design of the text is the dedication of three full chapters to mechanisms that may improve allograft survival: enhancement, anti-idiotypic antibodies, and suppressor cells.

The middle third of the book consists of seven chapters that focus on various aspects of the pathology or immunopathology of allograft rejection. Extrarenal causes of allograft dysfunction that might mimic rejection are (mercifully) minimized, which allows greater mention of the details of various forms of rejection, as well as some of the disturbingly difficult differential diagnoses (e.g., glomerulonephritis in the allograft, perfusion injury, acute tubular necrosis, and cytomegalovirus glomerulopathy). One of the highlights of this section is the description by Hayry of his technique for fine-needle aspiration biopsies of the renal transplant. The pathology color plates for chapters 10, 12, and 18 are excellent, but their placement in the middle of chapter 13 is bewildering.

In the third portion of the book, outstanding chapters include some about immunosuppressive therapy, one dealing with antilymphocyte antibody, another with monoclonal antibody to T3, and another dealing with cyclosporine nephrotoxicity. The clinical-pathological correlations in the latter chapter are particularly informative, as is the algorithm for the clinical use of cyclosporine in renal transplantation. The second-to-last chapter focuses on skin cancers, gynecologic cancers, and lymphoproliferative diseases. The final chapter is an overview of the material in the book and provides further updates.

Kidney Transplant Rejection provides information that is not easily accessible or as well presented in other similar books. It therefore represents a valuable addition to the library of anyone providing medical care for transplant patients.

WILLIAM E. BRAUN, MD

Department of Immunopathology
The Cleveland Clinic Foundation

Chronic Active Hepatitis: The Mayo Clinic Experience, edited by Albert J. Czaja and E. Rolland Dickson (Dekker).

This book, the second in a series pertaining to gastroenterologic subjects, begins logically with a description of disease classifications, followed by an excellent discussion of the natural history of the disorder. Several subsequent sections deal with treatment strategies, including a complete discussion of the metabolism of prednisone by the diseased liver. Various specific diseases (idiopathic, chronic B hepatitis, non-A non-B hepatitis, etc.) are then discussed separately. Next, the book includes two provocative chapters about controversies in the field and concludes with an overview.

Chronic Active Hepatitis is an excellent resource. The authors are undisputed authorities in the field. The topics chosen are of key interest to clinicians. For the most part, the writing is clear. The figures, tables, and graphs are understandable, although certain illustrations have legends that do not explain the meaning of some symbols.

Only a few criticisms should be noted. The text is quite repetitious. The same information could have been conveyed in half of its 368-page length. The same references, for example, are cited in almost every chapter. An entire section devoted to the differences between chronic active hepatitis, primary biliary cirrhosis, and sclerosing cholangitis could have been eliminated and the differential diagnosis discussed in just a few paragraphs of the first chapter. Nomenclature is not consistent. This has been a persistent problem in the literature of chronic hepatitis. The editors of this volume must be given credit for attempting to standardize terminology, but areas of confusion remain. "Idiopathic" and "autoimmune" chronic active hepatitis, for example, are used in a seemingly synonymous sense. In chapter six especially, the authors gave this reviewer the notion that they *are* synonymous. Yet information in chapter one makes it clear that the two are distinguishable serologically, even though the response to treatment is similar.

Chronic Active Hepatitis seems most appropriate for hepatologists and gastroenterologists with more than an incidental interest in the disorder. The text should be purchased by hospital libraries and GI departmental libraries of teaching institutions. For others who encounter only an occasional patient with chronic active hepatitis, excellent standard reference books about hepatology will suffice.

WILLIAM D. CAREY, MD

Department of Gastroenterology
The Cleveland Clinic Foundation