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ANNUAL REVIEW OF PULMONARY AND CRITICAL CARE MEDICINE

Edited by Richard A. Matthay, Michael A. Matthay, and Herbert P. Wiedemann

Hanley & Belfus

This third volume includes 17 chapters covering individual topics from within the field of pulmonary and critical care medicine. Specific topics include pulmonary function and exercise testing, diagnostic techniques, lung cancer, asthma, chronic obstructive pulmonary diseases, interstitial and occupational lung diseases, pneumonia, acquired immunodeficiency syndrome, and the respiratory muscles. Chapters with particular relevance to critical care medicine include those dealing with adult respiratory distress syndrome, mechanical ventilation, and hemodynamic monitoring.

The format consists of excerpted articles published within the preceding one to two years. Each article or group of articles is followed by an editorial comment assessing the strength of the article and its particular relevance to the field. Older work is frequently referred to and referenced within the discussion section. An average of 11 articles (range, 6–18) are specifically reviewed in each chapter. Most articles are selected from the major general medical journals and the pulmonary subspecialty journals. Most chapters also include articles from the basic science literature and/or another subspecialty area.

The book is geared toward the physician with a particular interest in pulmonary medicine and requires some familiarity with the field to fully appreciate the discussions. It should be of particular use to the busy practitioner or academician who lacks the time to stay abreast of the burgeoning medical literature. From that viewpoint, the book's brevity (200 pages) is both a strength and a weakness. While easily read, it is not a comprehensive overview of the existing literature.

The chapters are uniformly well written. The invited authors have done an excellent job selecting a mix of articles of both clinical and theoretical relevance. Minor exceptions include the chapter about pulmonary hypertension where the brief synopsis of the excerpted article prevents evaluation of the article on its own merits. The

equally brief subsequent editorial comment fails to provide the literature perspective found in the other sections. The chapter dealing with ventilatory control, in contrast to the other chapters, is written in essay form. Editorial comment overlaps the synopsised articles and proves to be a less-effective format. Finally, despite the book's title, the critical care chapters are limited to the three previously noted and do not include articles on more general aspects of critical care.

In total, the book is a well-written review of the current literature by recognized experts in their field. It has earned its niche in the medical literature.

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HYPERCHOLESTEROLEMIA: CLINICAL AND THERAPEUTIC IMPLICATIONS

Edited by Joseph Stokes III and Mario Mancini

Raven Press

The first two chapters of the 18th volume of *Atherosclerosis Reviews* examine the link between lipoprotein metabolism, the development of atherosclerosis, and its ultimate morphologic expression in the arterial wall. Epidemiologic evidence from prospective population-based studies and clinical trials of cholesterol lowering have established that hyperlipidemia is a very strong risk factor for the development of coronary artery disease and that dietary lipid-lowering drug treatment has a beneficial impact by reducing cardiac mortality. This data, which represent the basis for the current guidelines for the management of elevated cholesterol, are reviewed by the authors in two succinct, thorough chapters.

A summary of the new guidelines from the United States National Cholesterol Education Program and a similar European document provide recommendations for the treatment of hypercholesterolemia. As the knowledge on lipid metabolism accumulates, the potential for pharmacologic intervention at different metabolic sites has expanded. This is reflected in chapters covering the LDL receptor and the mechanisms of action of various classes of lipid-lowering drugs.

The remaining portion of the book is dedicated to the newest class of drugs in the therapeutic armamentarium—the HMG-CoA reductase inhibitors. An overview on the development and pharmacology of these agents, as well as clinical trials comparing them with other lipid-lowering drugs is presented and extensively referenced.

The book is based on proceedings of a symposium held in December 1987 in Paris and will be useful for clinicians with an interest in the evaluation and treatment of lipid disorders.

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MONOCLONAL ANTIBODIES IN DIAGNOSTIC IMMUNOCHEMISTRY

Edited by Mark R. Wick and Gene P. Siegal
Marcel Dekker

The virtual explosion in the number of commercially available monoclonal antibodies (MAb) with potential applications in diagnostic surgical pathology has left many practicing pathologists in a state of confusion. This book provides the essential background information. In addition, numerous tables provide the data that make the text useful as a quick reference guide for interpreting immunohistochemical (IH) results and for designing antibody panels appropriate for specific differential diagnostic problems.

The introductory chapter includes a sophisticated discussion of the genetic basis of antibody diversity and the production of MAb, along with a comprehensive, although somewhat tedious, discussion of various specific techniques for applying IH methods. In addition, a list of useful MAb together with their commercial sources and approximate specificities is provided.

The core of the book consists of 19 chapters, each devoted to a specific antigen or family of related antigens. Each chapter begins with a discussion of the antigen's biochemical properties. Various MAb, some commercially available and others experimental, that recognize the antigen of interest are then discussed. Finally, an attempt is generally made to discuss the sensitivity, specificity, and applicability of several MAb, as

well as the fixative or fixatives that should be used to optimize IH results. Four chapters are devoted to intermediate filament antibodies, which have proven to be particularly powerful reagents in the classification of a broad variety of neoplasms. Two chapters, which are quite detailed and comprehensive, concern the many lymphocyte differentiation antigens and leukocyte common antigen. Several chapters are devoted to antigens, such as milk-fat globule protein and carcinoembryonic antigen, that are expressed by various specific types of carcinomas. Discussions of four antigens that are relatively tumor specific, including prostate-specific antigen, prostatic acid phosphatase, human chorionic gonadotropin, and placental alkaline phosphatase, are included. The specificity of some of these antibodies may be somewhat overstated. The authors do suggest combinations of antibodies in some instances, where the specificity of a single antibody is inadequate for differential diagnosis. Three chapters are devoted to neural and neuroendocrine antigens including chromogranin, S-100, and anterior pituitary hormones.

The last three chapters diverge somewhat from the remainder of the text. The first is an interesting historical and current perspective on the issue of tumor-specific antigens. In the second, antibodies to microbial antigens are briefly discussed and the intriguing possibility of using MAb as a therapeutic tool against viral and parasitic organisms is also mentioned. In the third, Dr. Siegal concludes with a look toward the future, including a brief examination of the possibility of using IH to study the role of oncogenes in cancer.

Monoclonal Antibodies in Diagnostic Immunocytochemistry is very well written. Even though there are 20 different contributors, the editors have achieved consistency in format and quality from one chapter to the next. The usefulness of using panels of MAb and the potential pitfalls in interpreting IH results are appropriately stressed throughout the book. Despite a few omissions and oversimplifications, and the inherent difficulty in writing an up-to-date review of a very rapidly changing field, this text should prove most valuable to the practicing pathologist who has access to a comprehensive IH laboratory, as well as to pathologists in training.

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