

in critical care. It will serve its readers well as a reference textbook that includes state-of-the-art chapters and offers an international perspective on intensive care medicine.

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**Tuberculosis & Nontuberculous Mycobacterial Infections**, 5th edition. David Schlossberg MD. New York: McGraw Hill. 2006. Hard cover, illustrated, 523 pages, \$105.

In September 2006 there was news about a cluster of extensively drug-resistant tuberculosis (TB) in southern Africa, which had extremely high mortality (52 of 53 patients died). Tuberculosis remains one of the leading causes of death worldwide; approximately 2 million people die of TB yearly and one third of the world's population is infected with *Mycobacterium tuberculosis*. The current epidemiology makes TB one of the most important pathogens in the world.

**Tuberculosis & Nontuberculous Mycobacterial Infections**, 5th edition, is a comprehensive, multi-author textbook of TB and nontuberculous mycobacteria. Many of the contributors are internationally distinguished TB experts. The book has a hard cover, 523 pages, 39 chapters, and 3 sections. This new edition includes new chapters on bacillus of Calmette and Guérin, new TB vaccines, and paradoxical reactions and the immune reconstitution inflammatory syndrome. The book is most suitable for pulmonologists, infectious disease specialists, and public health practitioners involved in the field of mycobacterial diseases. There are complete and current reference lists at the ends of the chapters. Most chapters contain many tables and figures that highlight important points in the text. The index is comprehensive and accurate.

Part I, "General Considerations," includes TB epidemiology, pathophysiology, laboratory diagnosis, latent TB infection, and TB treatment. The chapter on TB epidemiology discusses the intriguing issue of "epidemic waves" of TB and gives a historical perspective on how TB has affected the world. The chapter on TB pathophysiology

is a concise yet comprehensive review, with many citations for new basic scientific findings. The chapter on latent TB infection includes a discussion of the QuantiFERON test, a relatively new whole-blood interferon gamma-release assay to diagnose latent TB infection. The chapter on multiple-drug-resistant TB contains the up-to-date approach for the treatment and management of the most important and lethal strains of TB. The chapter on bacillus of Calmette and Guérin and new TB vaccines includes the horizon of new candidate vaccines. The chapters on TB in "enclosed populations" and "role of the health department" will be useful to readers in the public health sector, to optimize local TB control.

Part II, "Clinical Syndromes," consists of 20 chapters, which cover the clinical presentation of TB, including pulmonary and extrapulmonary TB, pediatric TB, TB and human immunodeficiency virus, and diagnosis and management of specific TB sites (eg, ocular TB, genitourinary TB, and gastrointestinal TB). The chapter on endocrine and metabolic aspects of TB describes the interaction between the endocrine system and active TB. The chapter on hematologic changes in TB reviews the known hematologic effects of TB and its therapy.

Part III, "Nontuberculous Mycobacterial Syndromes," consists of 7 chapters on clinical manifestation and treatment of disease caused by nontuberculous mycobacteria. These chapters deal with mycobacterial disease commonly seen in clinical settings (*M. avium*, *M. kansasii*, *M. marinum*, *M. scrofulaceum*, and rapidly growing mycobacteria).

The editor states in the preface, "the goal of this book is to provide clinicians with a comprehensive yet practical resource for understanding, diagnosing, and treating TB." I believe he achieved his goal and provided a practical and informative resource for health care professionals who manage TB patients, at-risk populations, and patients with nontuberculous mycobacteria disease.

Unfortunately, the reproduction of some of the radiographic images was suboptimal. In addition, there are some illustrations in which color would have been beneficial (eg, World Health Organization statistics and graphs, and clinical physical images, including endoscopy images), but I understand the cost issue.

In summary, **Tuberculosis & Nontuberculous Mycobacterial Infections** is a valu-

able reference textbook for clinicians who encounter TB patients in their practice, and will also be a useful reference for public health practitioners in the field.

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**Reichman and Hershfield's Tuberculosis: A Comprehensive International Approach**, 3rd edition. Mario C Ravigliione, editor. *Lung Biology in Health and Disease* series, volume 219, Claude Lenfant, executive editor. Boca Raton: Informa Healthcare. 2006. Hard cover 2-volume set, illustrated, 1,246 pages, \$229.95.

The resurgence of tuberculosis (TB) in the United States and other developed nations over the last 2 decades, and recognition of the magnitude of the global TB epidemic have resulted in unprecedented levels of interest, investigation, and program development in this field. Major advances have occurred in our understanding of TB epidemiology, microbiology, genetics, pathogenesis, and host-pathogen interactions. We have new TB diagnostic tests, new therapies, better approaches to the management of drug resistance, and better understanding of TB co-infection with human immunodeficiency virus. New TB-control approaches have globally uniform principles yet can be tailored to the resources and priorities in different countries and regions. These programs rely on collaborative international interactions between governmental agencies, nongovernmental organizations, novel pharmaceutical industry programs, and local health care providers and volunteers.

Through these exciting times, Reichman and Hershfield's **Tuberculosis: A Comprehensive International Approach** has served as a reliable and authoritative guide to the key global developments in TB, and is written by an international "who's who" of TB experts. This text is part of the National Institutes of Health's *Lung Biology in Health and Disease* series, edited by Lenfant. The first and second editions were published 10 years apart, in 1990 and 2000.

This, the third edition, comes 6 years after the last, which perhaps reflects the accelerating pace of progress in the centuries-old fight against TB. The third edition also brings another change: Reichman and Hershfield have passed the editorial responsibilities to Raviglione of the World Health Organization. Their contributions to editing the first 2 editions are recognized in the new title, **Reichman and Hershfield's Tuberculosis: A Comprehensive International Approach**.

The content is organized into 2 parts, 6 sections, and 50 chapters, by 106 leading TB authorities.

The first section, "Basic Aspects of Tuberculosis," begins with an overview of the global TB epidemic, then presents highlights of the bacteriology, genomics, and evolution of TB. Later chapters address the epidemiology, transmission, and cellular and molecular pathogenesis of TB, and the human host response to TB.

The second section, "Clinical Tuberculosis," includes chapters on TB diagnosis and treatment, including latent TB, childhood TB, TB in the elderly, co-infection of TB plus human immunodeficiency virus, multiple-drug-resistant TB, and surgical treatment of TB.

The third section, "Control of Tuberculosis—Basic Principles and Tools," includes chapters on the history of TB control, TB control interventions, the role of laboratory networks in TB control, bacillus of Calmette and Guérin vaccination, contact tracing, case management by nurses, involving community members, the role of molecular epidemiology, economic and financial aspects of TB control, and the World Health Organization's Stop TB Partnership.

The first 3 sections compose the first volume of the text. This volume could stand alone as an excellent overview of the basic biology, epidemiology, clinical medicine, and public health considerations of TB. The second volume hangs together a little less well. Sections 4 and 5 cover TB control in various special populations and situations. Most of the individual chapters are excellent, but the unifying theme is less clear and the sequence seems more arbitrary. Also, there is considerable redundancy on some

topics (eg, chapters on TB control in the former Soviet Union, in congregate settings, and in prisons) and disproportionate emphasis in others (more space given to TB control in mines than in refugee and displaced populations).

The sixth and final section, "Building the Future," finishes strong. It presents arguments for new diagnostics, new drugs, new vaccines, research priorities, and strategies for reaching global targets for TB control. Although chapters of this sort run a high risk of quickly becoming outdated, these contain enough background information and explanation of rationale that they earn their place between the covers.

In the past, when preparing to write a book review, I have simply read the book and reported how well it accomplished its stated objectives and how helpful it would seem to be for the intended audience, all in a hypothetical way. In the present case, I lived with this two-volume text for several months and consulted it regularly, in a very targeted and practical way, to answer questions raised in my own practice and consultations, and by my other TB readings. As a result, my impressions are based on in-depth familiarity with some portions of the text, but less thorough study of other portions that are less relevant to my own needs.

In general this is a very thorough and authoritative text. The chapters are mostly well written and well referenced, and there is fairly good editorial consistency from one chapter to another. This is particularly impressive considering the large number of contributors and their diverse international backgrounds. Several chapters deserve special mention. "Tuberculosis Transmission and Infection Control in Congregate Settings" is an outstanding guide for anyone who encounters TB or suspected TB in a hospital or other congregate setting. The discussion of approaches in both low-prevalence resource-rich and high-prevalence resource-poor settings broadens the applicability of their approach and illustrates the important concepts. "Surgical Treatment of Pulmonary Tuberculosis" is another valuable chapter, not so much because of a unique cognitive approach as for its matter-of-fact discussion of potentially useful procedures

that seem to be increasingly unfamiliar to thoracic surgeons in low-prevalence areas. The chapter "Diagnosis of Pulmonary and Extrapulmonary Tuberculosis" not only reviews the available diagnostic tests but explicitly outlines how clinicians can formulate a clinical suspicion or pre-test probability of TB.

As are other volumes in the *Lung Biology in Health and Disease* series, this text is attractively bound. The formatting of the standard headings and text is exemplary. Personally, I find the many landscape-oriented tables distracting, but it is difficult to otherwise fit substantive tables into a small-format book such as this.

My biggest disappointment with this book is the figures. There are few or no figures in many of the chapters, and many of the figures have inconsistent and generally poor formatting. A disappointing number of the line and bar graphs appear to use the default formatting settings of a popular spreadsheet program. These are far from optimal in a text of otherwise high quality. I'd like to see more of the kind of work that appears in the molecular epidemiology chapter—real images supplemented by clear annotations and carefully drawn explanatory diagrams and schemes.

**Reichman and Hershfield's Tuberculosis: A Comprehensive International Approach** is an outstanding TB textbook. It can be viewed as part trusted reference for basic TB management and part international TB program guide. It will be a valuable resource for physicians, nurses, and other clinicians working in the field of TB. However, its sophisticated content will be less appropriate for the generalist physician, respiratory therapist, or other provider who has limited or infrequent contact with TB.

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