Case Studies in Infectious Disease


Garland Science, New York, NY, USA, 2010
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Pages: 608; Price: US $50.00

The authors have assembled a collection of case studies about the 40 infectious diseases that cause the most illness and death worldwide. Each chapter begins with a brief case presentation. This example is followed by a section on microbiologic aspects of the organism, including the pathophysiology of infection. The host response is then described, followed by a discussion of clinical manifestations, diagnostic methods, and treatment options, including prevention. A summary highlights salient points of each section. References, suggestions for further reading, and websites for additional information are all provided. Chapters conclude with a series of questions (answers are given at the end of the book).

The book is meant for use by medical students in a microbiology course, but it can also be used by any clinician who wants a concise review of the pathogens that cause infectious diseases. The case presentations are short and not presented as conditions having an unknown cause, but rather they serve as a clinical starting point to open discussion. The microbiology sections are geared more toward the student in a microbiology course and tend to have more details than are needed by a practicing clinician. The sections on patient symptoms are generally quite good and are inclusive. The varied clinical manifestations, particularly of the tropical diseases, are presented in an easy-to-understand format. The level of detail given provides a thorough yet succinct picture of each disease. The sections on diagnosis are generally inclusive, although a few did not mention some available diagnostic options used in the United States; this may have been due to differences in the availability of some tests in the United Kingdom, where many of the authors are based. The treatment sections tend to be abbreviated and frequently do not include the length of therapy and some other details that a practicing clinician would want to know. For those needing specific therapy guidelines, another source will be necessary.

The summary sections are quite good and are an excellent quick reference source if one wants just the highlights and a brief summary about the pathogen and disease. The questions at the end tend to be multiple choice with several possible correct answers for each one; they are not structured to prepare for testing purposes (such as for a board review). The websites are helpful sources for downloadable slides as well as for further information if more details are wanted.

The only chapter that was confusing was that on coxsackie viruses. The authors kept referring to other enteroviruses. The chapter could benefit from either fewer references to other enteroviruses or renaming it to be a section on enteroviruses in general.

Case Studies in Infectious Disease is a valuable compilation of information on the most common diseases that cause illness and death worldwide. The presentation format with distinct sections makes it readable and well suited for either students just learning about the pathogens causing infectious disease or clinicians who need an update. The level of detail is well thought out and gives the reader a useful summary of each pathogen and disease state. The condensed presentations make it a good reference source for those with insufficient time to read through more detailed textbooks.

Infectious Disease: Pathogenesis, Prevention and Case Studies

Nandini Shetty, Julian W. Tang, and Julie Andrews, editors

Wiley-Blackwell, Chichester, UK, 2009
ISBN: 978-1-4051-3543-6
Pages: 664; Price US $129.95

The organizing vision of this textbook is neither a taxonomic outline of the microbiologic world nor an epidemiologic understanding of our evolving insights into epidemics. Rather it is translational, ecologic, holistic, and distinctly clinical. It is a fun and readable book that engages the imagination and retains the interest of the clinically oriented reader while conveying an understanding of the direct implications of molecular characteristics of infectious agents to the practice of medicine.

The chapters in Part 4, Infections of Global Impact, and Part 5, Emerging and Resurgent Infections, are especially likely to fire the imaginations of students in introductory clinical microbiology or infectious disease classes. The chapters in Part 1, General Principles of Infectious Diseases, will equally effectively assist infec-
tious disease professionals in mid to late career who seek an easy and enjoyable way to refresh and update their understanding of such topics as microbial structure, mechanisms of action of antimicrobial agents, and laboratory approaches to investigation and diagnosis.

That said, this is not a book for all audiences. The success with which it integrates the microbiologic world with the world of medical practice sacrifices approaches that might engage persons for whom the end point of microbiologic interest is not human disease. It is neither balanced nor comprehensive enough to function as a definitive reference. Also, chapters vary in quality. In the chapter on host defenses, for example, attempts to simplify occasionally lead to unfortunately loose statements such as “Within man, there are certain well known racial differences in disease susceptibility…” among which it identifies “Dark skinned individuals have an increased susceptibility to coccidioidomycosis.” These statements confuse me.

I am aware that early 20th century surveys identified lower prevalence of hookworm disease among residents of the rural American South who are of African descent than among their neighbors of European descent despite similar living habits, environmental conditions, and levels of impoverishment. Accurately or not, these differences were attributed to racial variability in the effectiveness of skin as a barrier against larval hookworm invasion. But what can be the relevance of dark skin to an infection that invades primarily by inhalation of spores distributed in the soil of the American Southwest, Mexico, Central, and South America? In fact, susceptibility to primary coccidioidal infection is not affected by racial background. The frequency of dissemination is higher among Filipinos, Hispanics, and blacks. This frequency may reflect genetic host factors, or it may identify ethnicity or socioeconomic status as a marker for risk of environmental exposure to larger inocula. The jury is out.

Similar occasional failures to speak with precision distracted me and thus detracted from what is overall an excellent book. In contrast, the chapters on influenza, infections in the returning traveler (a tutorial in how to think like a travel medicine specialist), and emerging and resurgent infections were excellent.

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