Carol A. Kauffman · Peter G. Pappas Jack D. Sobel · William E. Dismukes Editors

Essentials of Clinical Mycology





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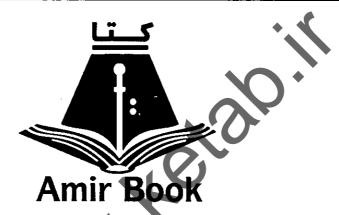
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Preface to the Second Edition

Since the publication of the first edition of this book in 2003, the field of clinical mycology has burgeoned. This is in no small measure due to increasing numbers of immunosuppressed hosts. Transplants of both solid organs and stem cells have become commonplace. In addition to patients who classically have been considered to be immune compromised, the expanded use of immune modifiers, such as tumor necrosis factor antagonists and other monoclonal antibodies, has created new populations at risk for fungal infections. Advances in intensive care have allowed survival of desperately ill patients, but also have created another population group at high risk for invasive fungal infections. Our understanding of the epidemiology of fungal infections has expanded with detailed studies on fisk factors and effects of various prophylactic regimens in specific at-risk populations and with the use of newer molecular methods.

The treatment of fungal infections has improved markedly in the few short years since the first edition was published. New antifungal agents have been licensed for use, and indications for the use of various antifungal agents have changed. New agents in the echinocandin and azole classes of drugs and the increasing use of lipid formulations of amphotericin B have allowed safer and more effective therapy for severe fungal infections, especially in immunosuppressed patients. The scientific basis of antifungal therapy has been enhanced with new studies on the pharmacodynamics and pharmacokinetics of these agents. Unfortunately, and perhaps not unexpectedly, these positive developments have been tempered by increasing resistance to several classes of antifungal agents.

For each of the medically important fungal diseases, we have attempted to integrate basic aspects of mycology pertinent to an understanding of pathogenesis of infection with an extensive discussion of clinical manifestations, diagnosis, and treatment. Color photographs are used extensively to illustrate the many different manifestations of fungal infections.

The book is organized, as before, into several distinct sections and is extensively indexed to allow easy access to the topics pertinent to patients cared for by busy clinicians. Part I gives a general overview of laboratory aspects of mycology, emphasizing newer molecular techniques that are assuming increasing importance in diagnosis, and of epidemiologic trends in fungal infections. The chapters in Part II give an in-depth review of the antifungal agents available for the treatment of systemic fungal infections. In addition, specific chapters deal with the expanding area of pharmacokinetics and pharmacodynamics, the increasing problem of antifungal resistance, and the use of combination antifungal therapy. Parts III–VI are devoted to individual fungal diseases, and are arranged by diseases caused by yeasts (Part III), moulds (Part IV), dimorphic or endemic fungi (Part V), and other mycoses (Part VI). The final section (Part VII) is devoted to specific immunosuppressed populations who are at high risk for fungal infections.

It is hoped that this text will provide a valuable resource for clinicians who do battle with the medically important fungi in their daily practices, as well as for those who only infrequently are faced with the "odd case" that could possibly be an unusual fungal infection.

C.A.K., P.G.P., J.D.S., W.E.D.

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