
The second edition of the Textbook of Medical Mycology is a vastly improved and amplified version with the number of pages almost doubled. This is, quite understandably, due to a thorough revision of almost all chapters, as well as liberal inclusion of figures, illustrations, photographs and photomicrographs of clinical conditions and disease pathology.

The basic design and work-plan of the textbook remains essentially the same as in its first edition, and so does the allocation or assignment of different disease entities to different sections. Due attention has been paid to some fungal diseases of current interest/importance, such as Malassezia furfur infections, Trichosporonosis, Penicillium marneffei infections, Pneumocystosis etc., all of which have traditionally deserved only cursory attention in textbooks on medical mycology, under the 'miscellaneous mycoses'. Various aspects of nomenclature, classification, pathogenesis, antifungal therapy, laboratory methods and associated terminologies have been suitably updated. The textbook is designed to teach the students the difficult discipline of medical mycology and identification of yeasts and molds that cause human infections. This is a difficult task because in mycology identification is based on observation (and sometimes on intuitive application of one's knowledge) rather than objective test results. The book also covers the basic terms essential to understand and discriminate between species of fungi. It supplements exposure to mycology in a clinical laboratory setting or in a classroom. Written both for mycologists and medical laboratory technology students, the author has applied his extensive knowledge to help the inexperienced appreciate the details of structure. The facts are presented in easy-to-learn modules, which make the material less difficult to comprehend. Most of the chapters have black-and-white photographs and companion drawings to emphasize the structures. The size of each photograph is adequate to see the characteristics that are intended to be depicted. There is a glossary (Appendix - F) at the end of the book, and the new/important terms are introduced in the text of a chapter, in bold font. Procedures (Routine Mycological Techniques – Appendix-C) and medical formulations (Appendix-A) are highlighted separately and appear to have been drawn from authoritative sources. Like its first edition, the second edition of this textbook is a good source book of Indian origin for those who wish to learn medical mycology and also a quick resource for terminology.

There are some obvious errors/oversights in this textbook, which are not surprising for a book of this size. The chapter on taxonomy of fungi requires a closer scrutiny and improvement. The fundamental concepts concerning fruiting structures in different classes of fungi, namely, Zygomycetes, Ascomycetes and Basidiomycetes need to be clarified more distinctly and with lucidity. The order Onygenales has two clearly defined groups of true dimorphic fungi like histoplasma in family Onygenaceae and dermatophytes in Anthrodermataceae. Onygenaceae also includes many other genera, which are not dimorphic. There is also a third family in order Onygenales - Gymonoascaceae that includes many geophilic and keratinophilic fungi. However, what should be appreciated here is that the perfect states of the dimorphic fungi Histoplasma capsulatum (Ajellomyces capsulatus) and Blastomyces dermatitidis (Ajellomyces dermatitidis) find their rightful placement in the family Onygenaceae, and likewise, the perfect states of dermatophytes (Trichophyton and Microsporum) in the family Arthrodermataceae. Till recently, all these taxa were included in one single family Gymonoascaceae, under the order Eurotiales. As the fungal taxonomy is dynamic and ever-changing, it is always better that a textbook writer makes it explicit right at the outset the classificatory system he would be following in the textbook. Inclusion of information (with adequate line drawings) on conidial types and conidiogenesis in Fungi-Imperfecti (Doutermycetes) in the second chapter would have greatly facilitated understanding and appreciation of the form and structure of these fungi and avoided lengthy description of morphological features.

The concepts of homothallism, heterothallism, monokaryon/dikaryon (dikayotization) to explain the intricate mechanisms of sexuality in fungi are conspicuously missing in this textbook. These are very fundamental to the understanding of life cycles of fungi. A mention of clamp-connection has been made under Basidiomycota on page 29; but the author does not convey the significance of these structures that they

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represent the dikaryotic condition of the hypae bearing them.

To conclude, the combination of information, illustrations, and self-assessment questions with answers provides a comprehensive learning package in this textbook. Though the text does not cover all aspects of every fungal infection in equal proportion, reading this textbook is an important first step in acquiring knowledge about organisms that cause human infections.

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