Preface

The New Medical Mycology

As early as two to three decades ago, fungal infections used to be extremely rare, and hence, therapeutic and diagnostic options were a low priority. Medical mycology used to be an art exiled to the basement of hospitals, medical schools, and research institutes, where giants laid the foundation for morphologic identification, culturing, biochemical testing, and serologic diagnostics. These same giants developed the first antifungals, some of which we still use today.

So, what changed? In the past few decades, we have seen giant leaps in medicine and surgery that have allowed patients with complex illnesses to survive previously nonsurvivable conditions, at the cost breaking down protective physical barriers and a deep compromise of their immune system, two things that normally keep fungi in check. This in turn has resulted in a rapid expansion of hosts susceptible to fungal infections. Cases that were rare or unusual, seen once per year in a medical ward or an intensive care unit, became the norm and a weekly routine. This eventually resulted in a parallel interest in the development of diagnostics and new therapeutic agents. We are now living the age of the new medical mycology, where medical mycologists are out of the basement and now interact daily with clinicians, drug developers, and policy-makers.

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Luis Ostrosky-Zeichner, MD, FACP, FIDSA, FSHEA, FECMM

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antifungal resistance, clinical reviews of major fungal pathogens, and primers on current/pipeline antifungals and susceptibility testing.

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