GUIDELINES FROM THE INFECTIOUS DISEASES SOCIETY OF AMERICA

Practice Guidelines for the Treatment of Fungal Infections

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During the last decade, the incidence of superficial and deep mycotic infections has continued to increase explosively. Fungal diseases were for many years considered a specialty area, consisting predominantly of endemic mycoses that affected unique subpopulations of individuals. The epidemiology of invasive mycoses has dramatically altered, to a predominantly nosocomial complication or event in an expanding population of at-risk hospitalized subjects. Two factors have had a dominating influence on the changing epidemiology of fungal disease. First, the number of at-risk patients for invasive mycotic infection has increased, as more patients have undergone chemotherapy and transplantation and received a growing array of immunosuppressive agents. The expanding number of patients is further magnified by longer survival, which extends the at-risk period. Patients with AIDS are particularly at risk for virtually all the invasive mycoses from recalcitrant oropharyngeal candidiasis to fulminant systemic mycoses. Second, the increase in fungal disease is in no small way a by-product of the ever-improving technology available to practitioners, including intravascular catheters and the drugs used to suppress the otherwise efficient host defense system.

Faced with the challenge of the increasing incidence of fungal diseases, the pharmaceutical industry responded, and the decade of the 1990s can be considered the decade of the antimycotics. The number of oral and parenteral antifungal agents has significantly increased, and recently more antifungal susceptibility tests have become available. Significant progress has been made for determining the application of these tests in routine clinical practice, an issue addressed in several sections of the practice guidelines.

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This guideline is part of a series of updated or new guidelines from the IDSA that will appear in *CID*.

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Table 1. Categories indicating the strength of each recommendation for or against its use.

Category	Definition
A	Good evidence to support a recommendation for use
B	Moderate evidence to support a recommendation for use
C	Poor evidence to support a recommendation for or against use
D	Moderate evidence to support a recommendation against use
E	Good evidence to support a recommendation against use

The practice guidelines for the treatment of fungal diseases have been developed with exactly that in mind. That is, we have provided a realistic practice guideline that takes into consideration a myriad of local circumstances under which clinicians make life-sustaining critical therapeutic decisions. In accordance with current guidelines of the Infectious Diseases Society of America, we have classified the strength of each recommendation and the quality of the evidence supporting that recommendation according to the schemes shown in tables 1 and 2, respectively [1]. In addition to therapeutic guidelines, we discuss numerous aspects beyond the selection of drug, dose, and duration of antifungal therapy. An attempt has been made to introduce epidemiological considerations and diagnostic criteria that impact on indications for and selection of antimycotic agents.

These practice guidelines for the treatment of fungal infections contain ~1000 literature references and are the product of over 40 specialists. They are a progressive step to enhance patient care, providing evidence-based recommendations for selecting antifungal therapy.

Reference

1. McGowan JE Jr, Chesney PJ, Crossley KB, LaForea FM. Guidelines for the use of systemic glucocorticosteroids in the management of selected infections. J Infect Dis **1992**;165:1–13.

Table 2. Grades indicating the quality of evidence on which recommendations are based.

Grade	Definition
I	Evidence from at least 1 properly randomized, controlled trial
II	Evidence from at least 1 well-designed clinical trial without randomization, from cohort or case-controlled analytic studies (preferably from >1 center), from multiple time-series studies, or from dramatic results of uncontrolled experiments
III	Evidence from opinions of respected authorities that is based on clinical experience, descriptive studies, or reports of expert committees