Antifungal susceptibilities of clinical isolates of Candida species, Cryptococcus neoformans, and Aspergillus species from Taiwan : surveillance of multicenter antimcrobial resistance in Taiwan program

data from 2003.

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摘要

Abstract

The susceptibilities of nonduplicate isolates to six antifungal agents were determined for 391 blood isolates of seven Candida species, 70 clinical isolates (from blood or cerebrospinal fluid) of Cryptococcus neoformans, and 96 clinical isolates of four Aspergillus species, which were collected in seven different hospitals in Taiwan (as part of the 2003 program of the study group Surveillance of Multicenter Antimicrobial Resistance in Taiwan). All isolates of Candida species other than C. glabrata and C. krusei were susceptible to fluconazole. Among the 59 C. glabrata isolates, 16 (27%) were not susceptible to fluconazole, and all were dose-dependently susceptible or resistant to itraconazole. For three (5.1%) C. glabrata isolates, voriconazole MICs were 2 to 4 µg/ml, and for all other Candida species isolates, voriconazole MICs were $\leq 0.5 \,\mu g/ml$. The proportions of isolates for which amphotericin B MICs were $\geq 2 \mu g/ml$ were 100% (3 isolates) for C. krusei, 11% (23 of 207 isolates) for Candida albicans, 3.0% (2 of 67 isolates) for Candida tropicalis, 20% (12 of 59 isolates) for C. glabrata, and 0% for both Candida parapsilosis and Candida lusitaniae. For three (4%) Cryptococcus neoformans isolates, fluconazole MICs were $\geq 16 \ \mu g/ml$, and two (3%) isolates were not inhibited by 1 µg of amphotericin B/ml. For four (4.2%) of the Aspergillus isolates, itraconazole MICs were 8 µg/ml. Aspergillus flavus was less susceptible to amphotericin B, with the MICs at which 50% (1 μ g/ml) and 90% (2 μ g/ml) nsrsid417869\delrsid7301351 of isolates were inhibited being twofold greater than those for Aspergillus fumigatus and Aspergillus niger. All Aspergillus isolates were inhibited by $\leq 1 \mu g$ of voriconazole/ml, including isolates with increased resistance

to amphotericin B and itraconazole. This study revealed the emergence in Taiwan of decreased susceptibilities of Candida species to amphotericin B and of C. neoformans to fluconazole and amphotericin B. Voriconazole was the most potent agent against the fungal isolates tested, including fluconazole- and amphotericin B-nonsusceptible strains.