Efficacy of Micafungin for Intra-abdominal Candidiasis: a Multicentre Clinical Study

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Background: There is a paucity of data regarding the drug susceptibilities of *Candida* spp. isolated from cases of intra-abdominal candidiasis. In addition, only a few studies have focused on appropriate management of the condition.
Methods: Intra-abdominal candidiasis cases are classified as either "definite" (*Candida* spp. isolated from blood or abscesses associated with peritonitis) or "suspected" (*Candida* spp. colonization and/or beta-D glucan positive with fever and unresponsive to antibiotic treatment). Between April 2013 and March 2014, forty-one intra-abdominal candidiasis patients (23 definite and 18 suspected cases), all non-neutropenic adults, were enrolled in this study; one patient was excluded. Micafungin was administered at a dose of 150 mg/day (definite group) or 100 mg/day (suspected group). Drug efficacy and susceptibility of isolated *Candida* spp. were evaluated.
Results: Forty-six strains of *Candida* spp. were isolated: *C. albicans* (39.6%), *C. glabrata* (29.2%), *C. tropicalis* (10.4%), *C. parapsilosis* (8.3%), and *C. krusei* (2.1%). Isolate susceptibilities against micafungin, amphotericin-B, fluconazole and other agents, as assessed by MIC_{90}, were comparable to isolates from neutropenic patients in previous studies. The mean duration of antifungal treatment was 14.5 days (definite group) and 11.3 days (suspected group), with a 30-day mortality rate of 12.5%. Only one adverse event, elevated liver transferase (n = 2, 5.0%) was attributed to the use of micafungin. The overall efficacy rates were 82.4% (definite group) and 73.3% (suspected group).
Conclusion: Intra-abdominal candidiasis is associated with high mortality. However, the *Candida* spp. isolated in this study were susceptible to micafungin. Micafungin satisfied both efficacy and safety concerns, and emerged as the treatment of choice for intra-abdominal candidiasis.