In vitro activity of fluconazole and voriconazole against clinical isolates of Candida spp. by E-test method.

ABSTRACT

The in vitro susceptibility of clinical Candida isolates towards fluconazole and voriconazole was determined using the E-test method. A total of 41 clinical isolates recovered from patients since 2004 until 2009 from two local hospitals in Kuala Lumpur, Malaysia were used. These comprised Candida tropicalis, Candida albicans, Candida krusei, Candida parapsilosis, Candida rugosa, Candida dubliniensis and Candida glabrata. Strains from American Type Culture Collection were used as quality control. Lawn cultures of the isolates on RPMI-1640 agar medium supplemented with 2% glucose were incubated with the E-test strips at 35°C for 48 h. Our results show that 71% were susceptible to fluconazole and 90% were susceptible to voriconazole. All strains of C. krusei were resistant to fluconazole and 50% were susceptible in a dose-dependent manner to voriconazole. Our study revealed that majority of the clinical Candida isolates was susceptible to fluconazole and voriconazole with a small percentage being resistant to both the drugs.

Keyword: Candida spp.; Voriconazole; Fluconazole; E-test