

عنوان مقاله:

Molecular identification of *Candida* species, assessment of the antifungal susceptibility and the genetic relationship of *Candida albicans* isolated from immunocompromised patients in Kerman, Iran

محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Sara Hamzehee - *Department of Medical Mycology & Parasitology, Faculty of Medicine, Kerman Medical University, Kerman, Iran*

Davoud Kalanter Neyestanaki - *Student Research Committee, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran*

Davoud Kalanter Neyestanaki - *Department of Microbiology and Virology, School of Medicine, Kerman University of Medical Sciences, Kerman, Iran*

Setareh Agha Kuchak Afshari - *Department of Medical Mycology & Parasitology, Faculty of Medicine, Kerman Medical University, Kerman, Iran*

Seyyed Amin Ayatollahi Mousavi - *Department of Medical Mycology & Parasitology, Faculty of Medicine, Kerman Medical University, Kerman, Iran*

خلاصه مقاله:

Introduction and Objectives: The goal of this study was to identify the candida isolates to the species level using conventional as well as molecular methods and to assess the in vitro susceptibility of *C. albicans* isolates. **Materials and Methods:** A total of 80 clinical samples of immunocompromised patients were collected. Yeast isolates were identified to the species level using conventional as well as PCR-RFLP methods. Also, four primers were used for RAPD analysis of *C. albicans* strains. All *C. albicans* isolates were tested for their in vitro susceptibility to the Fluconazole, Itraconazole, Amphotericin B and Nystatin according to the CLSI M27-A3 standard. **Results:** Of the sixty-one *Candida* isolates, the most common species was *C. albicans* (34.42%), followed by *C. glabrata* (24.59%), *C. parapsilosis* complex (18.03%), *C. krusei* (14.75%), *C. kefyr* (3.27%), *C. lusitanae* (3.27%) and *C. dubliniensis* (1.63%). RAPD-PCR results indicated *C. albicans* isolates allocate into three clusters (A, B, C) with higher than 80% homology level. The antifungal susceptibility results suggest that *C. albicans* isolates are the most susceptible to Amphotericin B (100%) followed by Itraconazole (90.47%). **Conclusions:** Our funding indicated that identification to species level is important for choosing proper antifungal treatment mainly in immunocompromised patients. We also could observe that RAPD assay was able to identify genetic variability among *C. albicans* isolates

کلمات کلیدی:

Candida spp., RFLP-PCR, RAPD-PCR, Antifungal susceptibility, Iran

لینک ثابت مقاله در پایگاه سیویلیکا:

