Geographic variation in the prevalence of cryptic species of the *C. parapsilosis* complex in 6 Latin American countries.

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*C. parapsilosis* is a common human pathogen able to cause superficial and invasive diseases worldwide. Recently, *C. parapsilosis* was characterized as a complex of species involving *C. parapsilosis* (sensu stricto), *C. orthopsilosis* and *C. metapsilosis*. There is little data about the real prevalence of cryptic species of *C. parapsilosis* complex in invasive human infections documented in different geographic areas. The aim of this study was to describe the prevalence and antifungal susceptibility profile of bloodstream isolates of *C. parapsilosis* species complex in Latin American hospitals. During a 24-month period we performed a laboratory-based survey of candidemia in 20 medical centers from Argentina, Brazil, Chile, Colombia, Ecuador, Venezuela and Honduras. A total of 218 bloodstream isolates of *C. parapsilosis* (sensu lato) were collected and tested. Speciation of the isolates was confirmed through molecular identification using a real time PCR. Antifungal susceptibility testing was performed using the CLSI broth microdilution method. Among the 218 isolates, 199 (91%) were identified as *C. parapsilosis* (sensu stricto), 15 (7%) as *C. orthopsilosis* and 4 (2%) as *C. metapsilosis*. Prevalence of *C. orthopsilosis* and *C. metapsilosis* ranged between 0 and 17.5% and 0 and 7%, respectively, among different countries. Chile had no single isolate of *C. orthopsilosis* and *C. metapsilosis*. All isolates were susceptible to amphotericin B (MIC ≤ 1 μg/mL), and anidulafungin (MIC ≤ 2 μg/mL). Regarding the azoles, 3 and 2 *C. parapsilosis* (sensu stricto) isolates were susceptible-dose dependent to fluconazole (MIC = 4μg/mL) and voriconazole (MIC = 0.5 μg/mL), respectively. Our data suggest that *C. orthopsilosis* is quite rare in Latin America being the vast majority of cases caused by *C parapsilosis* (sensu stricto). The currently used antifungal agents generally exhibited good in vitro activities against all *C. parapsilosis* (sensu lato) species.

Key words: *C. parapsilosis* species complex, Latin America, antifungal susceptibility

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