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O0048 EUCAST and Sensititre YeastOne susceptibility testing of antifungals against *Candida auris* from a Colombian outbreak

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Background: *C. auris* an emerging multidrug-resistant pathogen has been reported in several countries being implicated in nosocomial outbreaks. Commonly *C. auris* is resistant to the first-line antifungal drug fluconazole and can rapidly evolve to develop resistance to other antifungal drugs, so specific antifungal susceptibility testing is indicated. Regarding antifungal treatment decision, there are no CLSI or EUCAST defined breakpoints for *C. auris* susceptibility. The standardization of reference methods for antifungal susceptibility evaluation has led to comparative studies with some semiautomated commercial assays such as sensititre YeastOne systems to provide easier or more affordable susceptibility testing in clinical laboratory.

Materials/methods: The 41 *Candida auris* isolates were identified by sequencing of the ITS region and MALDI-TOF MS (Bruker). *In vitro* antifungal susceptibilities of all isolates to 8 antifungals (fluconazole, itraconazole, voriconazole, posaconazole, isavuconazole, caspofungin, 5-fluorocytosin, amphotericin B) were determined using the EUCAST broth microdilution method and data obtained by EUCAST were compared with those obtained by the commercial Sensititre YeastOne. Although specific clinical breakpoints have not yet been established, susceptibility categorization of *C. auris* isolates was based on non-species-specific *Candida spp*. MICs i.e. fluconazole (>4 mg/L) and amphotericin B (>2 mg/L). MICs for other antifungals were compared to ECOFF values previously proposed.

Results: Our results suggest that *C. auris* is non-susceptible to fluconazole (80,4%) by the two methods with an excellent essential agreement (92,7%). In contrast, a low concordance of susceptibility categorisation between EUCAST and Sensititre is observed for amphotericin B with 30 % and 97,5 % of susceptible isolates respectively. All isolates exhibit low echinocandin MIC values in Sensititre but two strains show MIC value of 8 mg/L for caspofungin by EUCAST suggesting an acquired resistance. A good agreement (78%) was observed for voriconazole and posaconazole. CMI range [0,03125-2], CI50 (0,5 mg/L) values were obtained for isavuconazole by EUCAST method.

Conclusions: Overall, except for caspofungin, Sensititre YeastOne method was compared favorably with the EUCAST reference method for determining the susceptibility of *Candida auris*. Discrepancies for amphotericin B and caspofungin must be explored. Further evaluation of the anidulafungin performance for determining *C. auris* resistance to the echinocandin class is warranted**.**