

Evaluation of culture media in the primary isolation and presumptive identification of yeasts from different biological samples

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In view of the increase in yeast infections, especially polymicrobial ones, differential culture media have acquired increasing importance. The study evaluated the Sabouraud chloramphenicol, Biggy agar, Pagano Levin agar and CHROMagar Candida media in terms of inhibition, isolation, quantification and morphological characteristics of the yeasts colonies; it also compared the classical identification with the API20C AUX system and it observed of yeast microbiota in the different biological samples. To this end, we used 223 biological samples, including feces, and vaginal, oral and anal mucosae contents from 86 patients presenting or not symptoms. Sabouraud chloramphenicol agar was the least effective in the bacterial inhibition and favored a greater development of the

filamentous fungi. The four media did not differ significantly in the numbers of yeasts. Eighteen species belonging to the genera *Candida*, *Saccharomyces*, *Cryptococcus*, *Trichosporon*, *Rhodotorula* and *Hansenula* were detected. The API20C AUX system correctly identified 92% of the species, although with the need for additional tests in 16% of cases. CHROMagar Candida e Biggy agar were complementary in the isolation of the different species and favored a greater recovery of polymicrobial cultures. Pagano Levin agar isolated the smallest variety of species. CHROMagar Candida enabled the presumptive identification of *C. albicans*, predominant species in the different samples. The results suggest that more than one culture medium should be used for in adequate first isolation.

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