Identification of local clinical Candida isolates using CHROMagar Candida TM as a primary identification method for various Candida species.

ABSTRACT

The objective of our study was to study the effectiveness of CHROMagar Candida TM as the primary identification method for various clinical Candida isolates, other than the three suggested species by the manufacturer. We studied 34 clinical isolates which were isolated from patients in a local teaching hospital and 7 ATCC strains. These strains were first cultured in Sabouraud dextrose broth (SDB) for 36 hours at 35°C, then on CHROMagar plates at 30°C, 35°C and 37°C. The sensitivity of this agar to identify Candida albicans, Candida dubliniensis, Candida tropicalis, Candida glabrata, Candida rugosa, Candida krusei and Candida parapsilosis ranged between 25 and 100% at 30°C, 14% and 100% at 35°C, 56% and 100% at 37°C. The specificity of this agar was 100% at 30°C, between 97% and 100% at 35°C, 92% and 100% at 37°C. The efficiency of this agar ranged between 88 and 100% at 30°C, 83% and 100% at 35°C, 88% and 100% at 37°C. Each species also gave rise to a variety of colony colours ranging from pink to green to blue of different colony characteristics. Therefore, the chromogenic agar was found to be useful in our study for identifying clinical Candida isolates.

Keyword: Andidiasis; Culture Media; Humans; Microbiological techniques; Sensitivity and specificity; Temperature.