Morphotyping of yeasts isolated from vaginal secretions of women pregnant and non pregnant preserved under mineral oil in the URM Culture Collection

Author(s) BRUNO SEVERO GOMES[1], CRISTINA MARIA SOUZA MOTTA[1], OLIANE MARIA CORREIA MAGALHÃES[1], DÉBORA MARIA MASSA LIMA[1], REJANE PEREIRA NEVES[1], LUSINETE ACIOLE DE QUEIROZ[1], ANA LÚCIA FIGUEIREIDO PORTO[2]

Institution(s) 1. UFPE, Universidade Federal de Pernambuco, Av. Prof. Nelson Chaves, sn - Cidade Universitária, Recife-PE 2. UFRPE, Universidade Federal Rural de Pernambuco, Rua Dom Manoel de Medeiros, s/n, Dois Irmãos - CEP: 52171-900 - Recife/PE

Abstract:

Aiming to characterize the yeasts isolated from vaginal secretion as a epidemiological tool to establish the identity and relation of species through the morphotyping, a total of 30 yeasts samples were used belonging to the genera Candida, Rhodotorula, Trichosporon and Kloeckera, having been isolated from vaginal secretion of pregnant and non pregnant women receiving care in public health service of the City of Paulista-PE. The yeast suspension obtained from colonies grown on Sabouraud dextrose agar at room temperature (RT = 28°C ± 1°C) for 48 hours was standardized in the 3rd MacFarland scale. The suspension was sown in striations of approximately 5mm width and 25 mm length on the surface of plates containing malt agar maintained at room temperature (RT = 28°C ± 1°C) for 10 days. Subsequently, macromorphological aspects of colonies were evaluated, as the presence of fringes and the characteristics of their surface, using the encoding according to the typification model. The morphotyping allowed the identification of 17 different morphotypes, with the dominance of morphotypes 000000 (distribution, width, texture of the fringe absent, the surface smooth topography of the stria surface, lacking quality and depth) and 524032 (continuous distribution of the fringe only on the surface, with width less than or equal to 2mm, delicate texture, smooth topography of the stria surface, with intermediate quality and scarce and plan depth). Due to the wide variety of samples, several morphotypes were identified in different species and under different physiological and symptomatic conditions. The results show that the morphotypes present significant differences regardless of species or the presence and absence of symptoms, being important for epidemiologicals, therapeutics and morphological variation studies.

Key words: Morphotyping, yeasts, vaginal secretions, URM Culture Collection