

## ADHERENCE OF *Candida albicans* AND *Candida parapsilosis* TO EPITHELIAL CELLS AND CORRELATION WITH CELL SURFACE CARBOHYDRATES

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Many studies are available on the adherence of *Candida albicans* to epithelial cells but little is known about *Candida parapsilosis* adhesion and its correlation with recognition of cell surface carbohydrates. This study aimed to evaluate the adherence ability of 20 *C. albicans* and 15 *C. parapsilosis* strains to human buccal epithelial cells and to analyze the expression of cell surface carbohydrates using lectin histochemistry. Adherence assays were carried out incubating epithelial cells with yeast suspensions. Horseradish peroxidase conjugated lectins (Con A, WGA, UEA I and PNA at 25 µg/mL) were used in lectin assay. Results showed that *C. albicans* is more adherent than *C. parapsilosis* ( $p < 0.01$ ), besides to present a high content of α-L-fucose moieties in the cell surface as indicated by UEA I staining pattern. Three isolates of *C. parapsilosis* presented adherence values and UEA I staining patterns ( $r = 0.8336$ ,  $P = 0.0001$ ) similar to that of *C. albicans*, indicating the presence of fucosylated components that may represent additional motifs through which interactions of this yeast with host cells could be established. In addition, results showed the presence of α-D-glucose/α-D-mannose, N-acetyl-D-glucosamine/N-acetylneuraminic acid and D-galactose/N-acetyl-D-galactosamine in fungal cell wall.

Supported by: CNPq

Keywords: *Candida*; Adherence; Epithelial cells; Lectin histochemistry.