

## RELATION BETWEEN HPV LESIONS WITH HIGH AND LOW DEGREE AND THE PRESENCE OF *Candida* spp IN CERVICAL SAMPLE

<sup>1</sup>RAMOS, R.T.B.; <sup>2</sup>MOREIRA, D.; <sup>3</sup>AULER, M. E.; <sup>1</sup>SANTOS, R.L.O.; <sup>2</sup>JUNIOR, J. M. S.; <sup>2</sup>LORENZI, N. P. C.; <sup>2</sup>TACLA, M.; <sup>1</sup>DOMANESCHI, C.; <sup>1</sup>PAULA, C. R..

1. Faculty of Odontology, University of São Paulo (USP), São Paulo, SP., Brazil.
2. Department of Obstetrics and Gynecology, Hospital das Clínicas, Faculty of Medicine, University of São Paulo, Brazil;
3. State University of the Western Center of Paraná-Unicentro, Brazil

Cervical cancer is third most frequent in the world. In Brazil, it is estimated that in 2016, 16500 new cases of uterine cancers were diagnosed. The main agent related to this type of cancer is the Human Papillomavirus. In the literature are described more than 150 HPV genotypes, being that the types 16 and 18 are the most associated with cervical intraepithelial neoplasias of high (CIN II and III), being responsible for 70% of cancers. Persistent inflammation, as those caused by *Candida* spp may facilitate the progression of HPV infections because they release pro-inflammatory cytokines. The aim of this study was to determine HPV association with yeasts of genus *Candida* spp as well as risk factors associated to infection by HPV. Were collected 42 cervical samples in the “Departement of Lower genital tract Pathology of Clinical Hospital of São Paulo”. This material collected was divided into two groups: Group 1, from women who high-grade squamous intraepithelial lesion and group 2, material collected from low grade squamous intraepithelial lesion. 30 sample were from material of women in group 1 and 12 from group 2. Among the comorbidities, in group 1, 10% had diabetes *mellitus* (DM), 6% systemic lupus erythematosus (SLE) and 6% were seropositive for human Immunodeficiency virus (HIV). In group 2, 8% had DM, 8% had LES, 16% were HIV positive and 8% had lymphopenia. In relation to the demographic data, in group 1 was verified that women had less schooling, lower income, higher amplitude of age than the women in the group 2. The research on the presence of *Candida* spp, in vaginal content showed that in group 1, 30% of women presented culture positive for *Candida* spp, and in Group 2, 33% showed presence of *Candida* spp. *Candida albicans* was the most prevalent, in both groups, and all were sensitive to the three tested antifungals (fluconazole, voriconazol and caspofungin), however, the samples of *Candida* spp (1- *C. tropicalis* and 1 *C. glabrata*), showed lower sensitivity to fluconazole. Our results demonstrate that the presence of *Candida* spp in the cervical sample with HPV high and low degree is similar. This fact suggests that there was no statistically significant association between HPV and *Candida* in the two groups studied, however, the presence of non-albicans *Candida* resistant to antifungal agents commonly used in medical practice serves as a warning to the correct identification of yeasts isolated in these patients.

Keywords: HPV lesions, *Candida* spp, cervical cancer.

Development Agency: CAPES