## Sexually transmitted infections in oral cavity lesions: Human Papillomavirus and *Chlamydia trachomatis*

Jessica P. Mosmann<sup>\*1</sup>, Angel D. Talavera<sup>2</sup>, Marina S. Monetti<sup>1</sup>, María I. Criscuolo<sup>2</sup>, Raúl F. Venezuela<sup>1</sup>, Ana X. Kiguen<sup>1</sup>, Ruth Ferreyra de Prato<sup>2</sup>, Silvia A. López de Blanc<sup>2</sup>, Cecilia G. Cuffini<sup>1</sup>

\* jessicamosmann@gmail.com Instituto de Virología "Dr. J. M. Vanella", Facultad de Ciencias Médicas – Universidad Nacional de Córdoba, Córdoba, Argentina. Enfermera Gordillo Gómez S/N- Ciudad Universitaria- CP5016- Cel: +54-351-153416035.

<sup>1</sup>Instituto de Virología "Dr. J. M. Vanella", Facultad de Ciencias Médicas – Universidad Nacional de Córdoba- Córdoba, Argentina.

<sup>2</sup>Facultad de Odontología- Universidad Nacional de Córdoba- Córdoba, Argentina.

**Objectives.** The aim of this study was to evaluate the presence of Human Papillomavirus (HPV) and *Chlamydia trachomatis* (*C. trachomatis*) in oral cavity lesions and rate the association between this co-infection, in Córdoba- Argentina.

**Methods.** We studied oral cytobrush and/or biopsy from 178 patients. Samples consisted of 26 benign lesions, 97 potentially malignant lesions and 55 oral squamous cell carcinoma. HPV and *C.trachomatis* were analyzed by Polymerase Chain Reaction method.

**Results.** The prevalence of HPV was 44%. Low risk genotypes were 6, 11, 84, 53 and high risk genotypes were 16, 31, 33. The prevalence of *C. trachomatis* was 11.8%. Statistical analysis did show significant association between the presence of both pathogens (p=0.004), however, there were no significant statistical association of HPV and *C. trachomatis* with kind of lesions and sex (p>0.05).

**Conclusions.** Sexually transmitted infections such as HPV and *C. trachomatis* could be risk factors to oral cancer. These results show the importance of detecting these pathogens as well as HPV genotype in all kind of oral lesions. Such data are important to improve our knowledge of the epidemiology of oral HPV and *C. trachomatis* co-infection. Indeed, *C. trachomatis* infection can alter the normal structure of epithelial cell junctions, increasing susceptibility to HPV infection, both in genital and oral mucosa. Oral sex contact may play a role in these infections and the specific antibiotic treatment against *C. trachomatis* could help to indirectly control HPV infection.

Financial support: Fundación A. Roemmers y SeCyT-UNC 204/2015.