
DOES THE EASY-TO-MAKE PENILE LESIONS DETECTION TEST HELP US IN ROUTINE DIAGNOSIS OF HIGH-RISK HUMAN PAPILLOMAVIRUS TYPES (HR HPV) IN MEN?

Vitaly Smelov¹, Galina Vedeneeva², Maria Selkova², Servaas A. Morre^{3,4,5}

¹*Faculty of Medicine, St. Petersburg State University, St. Petersburg, Russian Federation*

²*STI clinic ImmunoBioServis, St. Petersburg, Russian Federation*

³*Department of Pathology, Laboratory of Immunogenetics, Section Immunogenetics of Infectious Diseases, and Department of Internal Medicine, Section Infectious Diseases, VU University Medical Center, Amsterdam, The Netherlands*

⁴*Department of Medical Microbiology, Academic Hospital Maastricht, Maastricht, the Netherlands*

⁵*Department of Infectious Diseases, The City of Hope Medical Center and Beckman Research Institute, Duarte, CA, United States*

Background: It has been suggested that flat penile lesions (FPL) form the reservoir of HR HPV in men and might contribute to the viral spread. The implementation of an easy-to-make HR HPV diagnostic test into the routine patients examination would improve the HR HPV diagnosis, knowledge for its prevalence in men and male-female transmission, develop strategies for its prevention (i.e., the HPV vaccine usefulness in men).

Objectives: The goal of the study was to investigate the presence of HR HPV infection in FPL in the male Russian Caucasians.

Materials and Methods: A total of 50 men, mean age 31.6 (17–52) years were enrolled in the study (no STIs routinely tested at the time of examination) in September–December 2007 in a STI clinic (St. Petersburg). FPL were visually inspected after acetic acid

application, following the protocol provided by the Dutch collaborators. Penile swabs were collected. HR HPV types were screening for 14 oncogenic types, with following genotyping by type-specific PCR (AmpliSens HR HPV-genotype, Central Research Institute of Epidemiology, Moscow, Russia).

Results: In the study population FPLs were visualized in 32% and HR HPV prevalence was found in 38%, respectively; concordance between the FPL visualization and HR HPV detection was found 26% ($p=0.001$). Men with FPL had more sexual partners during previous 6 months (2.87 vs 1.86).

Conclusions: The visualization of FPL needs to be included into the routine male patients check-up: HR HPV infection was found in 81.3% men with FPL.

The first HPV-related FPL study in Russia has been initiated. At the moment we are in progress to: 1. extend the cohort; 2. confirm the findings by the internationally validated well-known GP5+/GP6+ test with subtyping (Amsterdam) and investigate the HPV distribution in men with: 3. co-infections, and 4. chronic urological diseases.