P–11; HPV TESTING: CORRELATIONS OF MOLECULAR BIOLOGY METHODS, IMMUNOHISTOCHEMISTRY AND IMMUNOCYTOCHEMISTRY

Lenka Ceganová¹, David Konvalinka¹, Jana Dvořáčková², Martin Cegan¹, Magdalena Uvírová¹, Jan Nieslaník¹, Eva Hošková¹, Jarmila Šustíková¹

¹CGB Laboratory Inc., Ostrava, Czech Republic

Background: Human papillomavirus (HPV) infection is a common, sexually transmitted infection. Both women and men are rapidly exposed to the virus after the onset of sexual intercourse. The risk of infection is bold increased by the number and risk behavior of sexual partners. Relation of HPV high risk subtypes infection (mainly 16, 18, 33, 35, 39, 45, 56 and 58) and cervical dysplasia or cervical carcinoma is commonly accepted. In time when a vaccination against HPV high risk subtype is possible, the testing of the infection presence may be well founded.

Objectives: Our work is targeted to comparison of four different methods to HPV testing: molecular biology testing by Hybrid Capture System II (Digene), immunocytochemical staining by Viroactiv HPV High Risk Kit (Virofem), Viroactiv HPV Screening Kit (Virofem) and immunohistochemical staining by mouse monoclonal antibody Anti-Human Papillomavirus type 16 (HPV-16) (clone CamVir-1) (BioGenex).

Materials and Methods: We examined a diagnostic material from volunteers (cytological smears), who wanted to be tested and from patients, where testing was indicated by gynecologist or pathologist in case of pathological findings that suggested presence of HPV infection (cytological smears and biopsy).

Results: We documented range of cases when molecular biology testing shows HPV positivity (both low risk and high risk) and immunohistochemical testing failed (mostly on cytological smears). We discussed possible explanation of this phenomenon.

²Dept of Pathology, Faculty Hospital, Ostrava, Czech Republic