
P-36; VIRAL PERSISTENCE – FACTOR OF CERVICAL LESIONS PROGRESSION

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Background: Type-specific DNA/RNA diagnosis is important for disease prognosis and treatment.

Objectives: Molecular detection of HPV DNA corroborated with E6/E7 viral mRNA and viral load as a predictive value for disease progression.

Materials and Methods: 78 patients over 29 years with ASCUS and LGSIL were selected from a cohort of 352 women enrolled in a study on HPV prevalence in different areas in Romania. HPV typing, viral mRNA levels and viral load were determined in cervical-brush specimens at baseline and in the samples obtained at 6–12 months interval after their cytological/colposcopy examinations. As negative controls, cervical specimens from 12 patients (age 29–43) without HPV infection (negative in InnoLipa and cytology tests) were used.

Results: At baseline, the selected women were HPV negative (26,9%) or presented HPV-16, -18, -31, -33, -45, -66 types as unique infection (28,1%) or co-infections. The distribution of HPV mRNA type was as follows: HPV-16 – 29%, HPV-18 – 13.8%, HPV-31 – 13.8%, HPV-33 – 13.8%, HPV-45 – 3.44%. After 6–12 months of clinical management, 58.9% of patients were HPV DNA negative. 3 HPV DNA negative women at baseline (no mRNAs detected), became HPV DNA positive (type 16 as unique infection or co-infection with type 33). Three woman positive for mRNA at base-line became HPV DNA negative after treatment, but they need to be monitored for a longer period. In patients with ASCUS cytology, 4 subjects presented significant viral loads in both samples; only in one case, the viral load was higher in the second sample.

Conclusions: Our results indicated that viral persistence, an important factor in cervical lesions evolution, might be associated with viral type, viral load and mRNA presence but the patients monitoring must be extended for a longer period of time.