P-18; THE STUDY OF THE MOST FREQUENT HPV GENO-TYPES IN CIN LESIONS WITH THE AIM TO PROPOSE THE MOST SUITABLE VACCINE AGAINST HPV IN ROMANIA

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Objectives: 1. to determine the incidence of HPV infection by PCR and genotyping, 2. to determine the most frequent genotypes of HPV in Romania in CIN lesions for the next strategy of vaccination of the population (women or men).

Materials and Methods: Between 2005 and 2007 we investigated 1,200 women for the presence of HPV by means of LIPA method which can now detect sixteen HPV genotypes in single or multiple infections by PCR and hybridizations on strip.

Results: In our study the HPV prevalence was 73%. In HPV positive group 46% were single HPV infections, 41% were multiple infections and 13% were undetectable. Most frequent were HPV-HR genotypes (59%), followed by mixed infections with HPV-LR+HR genotypes (23%), HPV-LR (7%) and HPV-X (13%). The most frequent HPV genotypes in our study group were HPV-16 (44%), followed by HPV-31 (42%), HPV-66 (40%), HPV-6 (35%), HPV-53 (33%), HPV-51 (30%), HPV-18 (19%), HPV-33 (16%), HPV-52 (10%) and HPV-11 (9%). In the respective categories of cytological findings the distribution of HPV genotypes was: *ASC-US* – HR-HPV 43%; mixed HR/LR-HPV 29%; LR-HPV 29%, *L-SIL* – HR-HPV 88%; mixed HR/LR-HPV 13%, *H-SIL* – HR-HPV 62%; mixed HR/LR-HPV 33%; HR-HPV 5%, *CIS* – HR-HPV 100%. The highest prevalence of HPV was in the age category of 26-30 years, which represented 44 % of the study group.

Conclusions: The high incidence of HPV infections in Romanian population is correlated with the high incidence of cervical cancer in Romania, which is the second highest in Europe. Using highly sensitive detection assays for HPV the primary screening for cervical cancer might be improved in comparison to the use of Pap test. The most frequent HPV genotypes in Romania are: HPV-16, -31, -66, -6, -53. Therefore these genotypes should be included in the complex vaccine for Romania. It might be also interesting to correlate HPV distribution in our country with the prevalence of HPV types in other Balkan countries.