P–08; **HUMAN PAPILLOMAVIRUS GENOTYPE DISTRIBUTION IN CZECH WOMEN AND MEN WITH DISEASES ETIOLOGICALLY LINKED WITH HPV**

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Background: The HPV type distribution is the most crucial parameter for estimation of the impact of cervical cancer screening and HPV vaccines on incidence of diseases etiologically linked with HPV.

Objectives: Recently meta-analyses of HPV type distribution worldwide have been published but data from the Czech Republic were not included.

Materials and Methods: Samples of squamose cell carcinomas from different anatomical locations (N=297) as well as samples of precancerous lesions (N=719) available in the bank of the National Reference Laboratory for Papillomaviruses in Prague were included. In this study samples of cancers from following locations were analyzed: cervix (SCC), vulva (VC), anus (AC), urinary bladder of male (BC), prostate (PC), head and neck (HNC). Samples of precancerous lesions were available from low-grade (LGL) and high-grade (HGL) cervical lesions, vulvar intraepithelial lesions (VIN) and anal adenomas (AA). HPV detection and typing was done using PCR with GP5+/6+-bio primers and reverse line blot assay. This method can detect at least 37 different HPV types and determine positivity for multiple HPV types.

Results: Altogether, 94% of SCC, 34% of VC, 81% of AC, 62% of HNC, 8% of BC and no PC were HR HPV positive. Further we detected HPV in 87% of HGL, 61% of LGL samples, 87% of VIN and 40% of AA. HPV-16 was the most prevalent genotype in all types of carcinoma (63–90%). In SSC 8 other HR HPV types were detected while in other cancers only HR HPV-16, 18, 33 and 45 have been found. In cervical precancerous lesions bigger variety of HPV types was present but the same was not truth for precancerous lesions in other locations. Multiple infections were found mainly in the cervical lesions.

Conclusions: The HPV type distribution in Czech women and men with diseases etiologically linked with HPV is very similar to the distribution revealed by recent worldwide studies. The proportion of lesions and carcinomas, which contain one or both vaccination HR HPV types and therefore can be prevented by vaccination, is considerable.

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