Human papillomavirus DNA detection in women with primary abnormal cytology of the cervix: prevalence and distribution of HPV genotypes.

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Abstract

OBJECTIVES: In this study, we focus on the prevalence and occurrence of different anogenital human papillomavirus (HPV) genotypes in a first abnormal cervical screening test, and correlate HPV genotyping with the cytological diagnosis on thin-layer liquid-based preparations in routine gynaecological screening. METHODS: Out of 780 abnormal smears, 513 tested positive for HPV. All 25 different HPV types were identified by Line Probe Assay. RESULTS: The prevalence of high-risk HPV types increased from 72% in atypical squamous cell of undetermined significance to 94.5% in high-grade intra-epithelial lesion (HSIL). Co-infection with multiple HPV types was predominantly found in HSIL (35.8%). In the HSIL group the most common HPV types were 16, 52, 51 and 31; type 18 was rarely present. CONCLUSION: The role of types 31, 51 and 52 should be considered in future studies on vaccine development.