

ORAL PRESENTATIONS

HUMAN PAPILLOMAVIRUS INFECTION IN CERVICAL ABNORMALITY IN NORTHEAST THAILAND

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Materials and Methods: Case-control studies on human papillomavirus (HPV) infection were done in patients with cervical

squamous intraepithelial lesions (SIL) and squamous cell cervical cancer (SCCA) in Northeastern Thailand.

Results: Prevalence of high-risk group of HPV (-16,-18,-31,-33,-35,-52b, and -58) infection was 13.0–18.1% in controls, 32.6% in low SIL (LSIL), 80.0% in high SIL (HSIL) and 86.7% in SCCA. HPV infection significantly increased risk for overall SIL 6.8-fold ($p<0.001$), and also increased the risk for transition from LSIL to HSIL 8.3-fold ($p<0.001$) resulting in the risk for HSIL as high as 18.1-fold ($p<0.001$). High risk HPV infection was also associated with the risk for cervical cancer 43.5-fold ($p<0.00001$). Among HPV positive patients, HPV-16 infection was the commonest (50%) in SIL and increased the risk for HSIL (OR=53.8; $p<0.001$). In the SCCA patients, HPV-16 was also prominent (70.5%) followed by HPV-18 (23.1%); however, statistical difference in the subtype distribution was not observed in between the SCCA and the control.

Conclusions: HPV-16 is a critical risk factor for LSIL to HSIL transition as well as cervical cancer development. In addition, as suggested by our previous study, smoking is associated with the risk for cervical cancer development, prevention of not only HPV infection causing cervical abnormalities but also smoking enhancing HPV infection and cervical hyperplasia should be emphasized in the public health scheme and education.