

**[S2-3] [10/21/2004(Thur) 15:20-15:50/Room 205]**

## **Clinical Utilization of Human Papillomavirus Testing**

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High risk human papillomavirus (HR HPV) infection is considered to be the necessary cause for the development of cervical cancer, based upon the epidemiologic and experimental studies. HPV is difficult to be cultured, so serologic testing for clinical purpose is not available. HPV testing using HPV DNA is currently used in three clinical conditions, such as screening for cervical neoplasia, triage of borderline lesion and posttreatment followup tests after cervical precancerous lesion. As a primary screening test, its efficacy is stressed about the high sensitivity and the accessibility of patients (self-sample collection) compared to conventional cytologic test. In triage test, borderline cytology (atypical squamous cell - undetermined significance) can be discriminated into benign reactive or malignant lesion. Finally HPV testing is used as a followup test after treatment of cervical precancerous lesion for early detection of recurrence and residual lesion. However, high false positive rate is the problem due to frequent transient HPV infection by sexual contact with multiple partners in younger women. To decrease the false positive rate, HPV testing is used in women older than 30 years. In future, additional biomarker is necessary for decreasing the false positive rate and the predictability of the low grade lesion into the high grade lesion. Additionally if effective agent for HPV infection and precancerous cervical lesion be developed, it could be used as an important surrogate marker.