epidermal growth factor receptor 2 (HER2) overexpression and programmed death-ligand 1 (PD-L1) positive immunohistochemistry in vulvar Paget disease in Thai women.

Methods: A cross-sectional study was conducted in King Chulalongkorn Memorial Hospital, Bangkok, Thailand. Histologically diagnosed patients with vulvar Paget disease from January 2000 to April 2020 were identified. Clinical data were collected from medical records and histologic data were verified by pathological review. Pathologic specimens were collected. HER2 and PD-L1 immunohistochemistry were performed. The results of staining were reported by two pathologists. Data were analyzed using descriptive statistics and reported as percentage and 95% confidence interval (CI). Clinical outcomes were correlated with immunohistochemistry expression.

Results: Thirty-three vulvar Paget disease cases were included in the study. Twenty patients (60.6%, 95% CI=42.1-77.1) had HER2 overexpression. All patients were negative for PD-L1 immunohistochemistry. HER2 positive patients had hazard of death 2.94 (95% CI=0.61-14.23) times compared with HER2 negative patients. HER2 positive status had relative risk 1.95 and 1.73 for invasive and metastatic disease respectively.

Conclusion: More than half of vulvar Paget disease patients had HER2 overexpression and might benefit from anti-HER2 targeted therapy. A higher proportion of HER2 overexpression was found in invasive and metastatic vulvar Paget disease. PD-L1 was not expressed in vulvar Paget disease.

Poster (C04)

Preinvasive Disease of Cervix, Vulva, and Vagina
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Is human papillomavirus genotype important in predicting disease progression in women with biopsy-proven negative or CIN1 of LSIL cytology?

Woodae Kang,* UChul Ju, SeokMo Kim

Chonnam National University Medical School, Gwangju, Korea
 (woodai75@naver.com)

Objective: Our aim was to estimate the risk of disease incidence in women with low-grade squamous intraepithelial lesion (LSIL) without histology-proven cervical intraepithelial neoplasia grade 2 or worse (CIN2+) by human papillomavirus (HPV) genotype.

Methods: Between January 2002 and December 2010, incidence of CIN2+ in 1,580 women including 575 with LSIL and histology-proven negative and 1,005 with LSIL with histology-proven CIN1 was investigated. Baseline high-risk-HPV status was determined by the hybrid capture II assay and high-risk-HPV genotype by

the HPV DNA chip test. Cumulative incidence and hazard ratios (HRs) were estimated to explore differences between index data and associations with CIN2+.

Results: Of the 1,580 women, 139 (8.8%) patients developed CIN2+. The 5-year cumulative incidence rate of CIN2+ in HPV-16, HPV-18, and HPV-58 were 18.7%, 16.1%, and 12.9%, respectively. On multivariate analysis, being positive in HPV-16 (HR=2.324; p<0.01), HPV-18 (HR=2.315; p<0.01), and HPV-58 (HR=2.051; p<0.01) were significantly associated with developing CIN2+ compared to being negative for that type.

Conclusion: Among women with LSIL, HPV-16, HPV-18, or HPV-58 positive women may need intensified follow-up as they have the highest risk of becoming CIN2+.

Poster (C05)

Gynecologic Cancer Screening
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Liquid-based cytology for cervical cancer screening compared between spatula-cotton swab and spatula-cytobrush: a randomized controlled trial

Perapong Inthasorn,* Wiphaewee Hochaame, Somsak Laiwejpithaya, Chatchai Areeswate

Siriraj Hospital, Bangkok, Thailand (perapong_i@hotmail.com)

Objective: The presence of endocervical cell/transformation zone (EC/TZ) component is still described as a quality indicator in the 2014 Bethesda System. In addition, the presence or absence of EC/TZ component is a useful quality assurance measurement. The aim of this study was to compare the percentage of satisfactory samples with presence of EC/TZ components between samples collected by spatula-cotton swab and by spatula-cytobrush for cervical cancer screening using Siriraj liquid-based cytology.

Methods: This randomized controlled trial was conducted during January 2020–March 2020. A total of 1,400 women were recruited. Study women were randomly allocated to either the spatula-cotton swab group or the spatula-cytobrush group (700 women per group). All samples were sent for cytologic interpretation and determination of satisfactory sample with presence of EC/TZ component.

Results: There were no significant differences in baseline characteristics between groups. The percentage of satisfactory samples with presence of EC/TZ components was significantly higher in the spatula-cytobrush group than in the spatula-cotton swab group (87.1% vs. 75.9%, respectively, p<0.001). There were no significant differences between 2 groups relative