EPV118/#381

THE INCREASED INCIDENCE OF UTERINE CANCER WITH HIGH RISK HISTOLOGIES – A POPULATION STUDY FROM THE TAIWAN CANCER REGISTRY

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10.1136/ijgc-2021-IGCS.188

Objectives To evaluate trends in uterine cancer diagnosis and incidence by histology in Taiwan between 2001–2017.

Methods Data were obtained from the Taiwan Cancer Registry of Taiwan Health and Welfare Data Center for women diagnosed with a malignancy of the uterine corpus from 2001 to 2017. Joinpoint regression analysis was used to evaluate and project trends over time.

Results There were 26,827 women in Taiwan Cancer Registry diagnosed with uterine cancer between 2001–2017, including 25.2% with grade (G)1-endometrioid endometrial carcinoma (EEC), 36.5% with G2-EEC, 25.2% G3-EEC, 3.5% with uterine serous carcinoma (USC), 3.4% with uterine carcinosarcoma (UCS) and 2.1% with uterine clear cell carcinoma (UCCC). The proportion of women with a high-risk histology defined as G2-EEC, G3-EEC, USC, UCS, or UCCC increased from 51% to 63% when diagnosed at 50–59 or 60–69 years of age, respectively. The average incidence per 100,000 by histology was 9.2 with EEC, 0.64 with USC, 0.51 with UCS, and 0.25 with UCCC. The annual percent change (APC) in incidence between 2001 and 2017 increased by 10.6% for a USC diagnosis, 5.8% for a UCS diagnosis, and 4.6% for a UCCC diagnosis. Predictive modeling projects that the incidence of USC in women between 60–64 years old will surpass G1-EEC incidence in the same age group by 2022.

Conclusions High-risk uterine cancers constitute a substantial portion of the uterine cancers in the Taiwan Cancer Registry, particularly for women in their 60s or older. This exponential rise has important health and welfare implications in Taiwan and the International community.

EPV119/#397

VOLUME OF NODAL DISEASE AND ONCOLOGIC OUTCOMES IN ENDOMETRIAL CANCER PATIENTS WITH POSITIVE SENTINEL LYMPH NODES: AN ITALIAN MULTI-INSTITUTIONAL STUDY

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10.1136/ijgc-2021-IGCS.189

Objectives To assess predictive factors for sentinel-lymph-nodes (SLNs) involvement and recurrence-free-survival (RFS) in patients with endometrial cancer

Methods A multicenter retrospective evaluation of endometrial-cancer patients with positive (macro-micro metastases or ITCs) SLNs, treated between 2003 and 2020, was performed. Predictive factors for nodal involvement (endometrioid vs non-endometrioid histology, grading, lymphovascular-space-invasion (LVSI), myometrial-invasion (MI), cervical-stromal-invasion, ESGO/ESTRO/ESP risk group), adjuvant therapy and oncological outcomes were evaluated

Results 142 patients were identified among 12 participating centers. In 64.8% of cases a low-volume disease (≤ 2 mm) was found in SLNs: 33 (23.2%) ITCs and 59 (41.6%) micrometastases. Predictors of macrometastatic SLNs were: high grade [p:0.002], LVSI [p:0.007] and MI $>50\%$ [p:0.008]. 17 (18.5%) patients with low-volume disease (8 micrometastases and 9 ITCs) did not receive any adjuvant therapy. At a mean follow-up of 34.6 months (range 1–215) months, 21 (14.8%) relapses were recorded, only one among patients not receiving any adjuvant. The RFS at 2-years for the micrometastatic patients was 91%, similar to ITCs patients (79.1%), regardless of adjuvant treatment, but statistically better than patients with macrometastases (72.3%) [p: 0.026]. The only factors affecting RFS were deep MI [p:0.03] and cervical stromal invasion [p:0.046].

Conclusions More than half of patients with positive SLNs had low-volume disease. Grading, MI and LVSI predicted volume of nodal metastases. MI and cervical invasion affected RFS; while adjuvant treatment did not seem significantly associated with RFS in patients with low-volume disease. Longer follow-up time and a larger sample size are needed to understand the role of adjuvant therapy in low-volume metastatic SLNs.

EPV120/#399

ENDOMETRIAL CANCER: MOLECULAR ANALYSIS AND CLINICOPATHOLOGICAL CORRELATION: A PILOT STUDY

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10.1136/ijgc-2021-IGCS.190

Objectives Aim/Introduction: Limited reproducibility and imprecise risk estimation of traditional classification have paved the way for molecular research in endometrial cancer. The study aims to determine the prevalence of Polymerase Epsilon gene (POLE) mutation, P53 mutations, and microsatellite instability (MSI) in endometrial cancer, followed by clinicopathological correlation.

Methods Materials and Methods: A retrospective cohort involving 50 consecutive patients of primary endometrial carcinoma was identified from 01.01.2016 to 01.02.2018 using the computerized database. Molecular classification of endometrial cancer was done with the following components. POLE ultramutated: using exon 9–14 mutational analysis, Microsatellite instability (MSI) using Mismatch repair protein IHC (MLH1, MSH2, MSH6), and Copy number high/low: using p53 IHC as a surrogate marker.