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Objective: To determine the preoperative clinical characteristics associated with uterine sarcoma in patients with uterine mass.

Methods: We retrospectively reviewed medical records of patients who presented with uterine mass undergoing surgery at Ramathibodi Hospital, with a pathologically confirmed diagnosis, from April 1, 2000 to October 31, 2019. The cases were patients with uterine sarcoma, whereas the controls were patients with leiomyoma diagnosed in the same year, with a proportion of 1 case per 4 controls. The association between preoperative clinical characteristics and uterine sarcoma were analyzed.

Results: There were 18,218 patients with uterine mass undergoing surgery at Ramathibodi Hospital during the study period. Uterine sarcoma was diagnosed in 68 patients. Thus, the incidence of uterine sarcoma was 0.37%. Patients with uterine mass, patients with age >40 years old, postmenopause, postmenopausal bleeding, abnormal uterine bleeding, palpable mass, recognition of rapid growing mass, and with single tumor nodule identified by ultrasonography were more likely to be diagnosed with uterine sarcoma with adjusted odds ratio (95% confidence interval) of 3.30 (1.29–8.43), 8.57 (2.38–30.82), 35.35 (2.94–425.13), 3.39 (1.40–8.23), 4.50 (1.78–11.36), 6.91 (2.08–22.91) and 4.70 (1.91–11.60), respectively.

Conclusion: Clinical characteristics, i.e., age >40 years, postmenopause, postmenopausal bleeding, abnormal uterine bleeding, palpable mass, mass with rapid growth, or single uterine nodule identified by ultrasonography were considered an independently strong association with uterine sarcoma in women who presented with uterine mass.

Poster (E13)

Gynecologic Pathology, Genetics and Epidemiology

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Prevalence of abnormal MMR proteins in newly diagnosed endometrial cancer patients

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Objective: To estimate the prevalence of abnormal mismatch repair (MMR) proteins in newly diagnosed endometrial cancer patients who underwent surgery aged less or equal than 55 years old.

Methods: A cross-sectional study with a medical record review of the endometrial cancer patients who underwent surgery

between January 2014 and December 2019. The clinical and pathological data were collected. The paraffin tissue blocks and slides were reviewed. Tissue microarray analysis and immunohistochemistry (IHC) of MMR proteins were performed by one gynecologic pathologist. The prevalence of abnormal MMR was estimated. The clinical, pathological data and related factors were analyzed.

Results: The 44 of 188 patients (23.4%) had MMR proteins deficiency (dMMR). dMMR pattern showed as pair of MLH1 & PMS2; MSH2 & MSH6, and isolated PMS2; MSH6; MSH2 which were 22/44 (50%), 8/44 (18.2%), and 6/44 (13.6%), 5/44 (11.4%), 3/44 (6.8%), respectively. The patients with dMMR proteins significantly had body mass index (BMI) <25 kg/m² (56.8% vs. 38.9% in deficient and proficient MMR proteins, respectively) (p=0.036). Stage IIIC1 is associated with dMMR proteins (25% vs. 7.6% in deficient and proficient MMR proteins, respectively) (p=0.004).

Conclusion: In newly diagnosed endometrial cancer patients aged less or equal than 55 years old revealed 23.4% of dMMR proteins from IHC. MMR proteins-deficient associated with BMI <25 kg/m² and stage IIIC1.

Poster (E14)

Gynecologic Cancer Screening

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Risk factors in young reproductive women with endometrial cancer: an observational study

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Objective: Incidence rates of endometrial cancer are increasing over the time in all ages, corresponding with an increase in the young women. Multiple risk factors have been identified such as unopposed estrogens, nulliparity, obesity, family history of malignancy, polycystic ovaries, diabetes, hypertension etc. The objective of study was to conduct clinic-pathological analysis and predict the risk factors for development of endometrial cancer in reproductive age group women in Indian population and to identify preventive measures for this group.

Methods: A retrospective review of women with endometrial cancer was performed. Medical records analyzed for histopathologically confirmed and treated endometrial carcinoma patients between February 2012 and August 2020. Out of 129, only 10 women were pre-menopausal and under the

age of 45 years at the time of diagnosis. Data were abstracted regarding age, parity, diabetes, hypertension, polycystic ovaries, body mass index (BMI), tumor histology, grade, stage, and survival. Clinical and pathological characteristic were compared, and statistical analyses were performed using SPSS version 22.0.

Results: The mean age at the time of diagnosis was 38.50 years (range, 34.50–41.25) and mean BMI (kg/m²) was 30.55 (range, 27.23–38.45). 50% patients were obese (BMI >30 kg/m²) and 40% were overweight (BMI 25–30 kg/m²). Only 5 out of 10 women had nulliparity, however, 70% women had history of polycystic ovaries, confirmed with ultrasound or on histopathological specimen. Family history was also found to be strongly associated with endometrial cancer with 70% prevalence rate. The prevalence of diabetes mellitus, hypertension and hypothyroidism were 20%, 10% and 10% respectively. Seven patients (70%) had well differentiated tumors, 2 (20%) moderately differentiated and 1 (10%) had poorly differentiated tumor. Stage 1A disease was found in 7 (70%) patients, stage 1B in 1 (10%), stage 2 in 1 (10%) and stage 3 in 1 (10%) patient. 20 % patients had completed 5-years disease free interval, one patient was expired with recurrence and stage 3 disease, while 1 woman was lost to follow up after surgery.

Conclusion: We conclude that the obesity, family history and polycystic ovaries are strongly associated risk factors for endometrial cancer in women aged 45 years or younger. We could not find any significant association with medical disorders such as diabetes and hypertension. Nulliparity seems to have less strong relationship with development of endometrial cancer. Majority of young patients have early-stage disease with well differentiated tumors and favorable histology.

Poster (E15)

Endometrial Hyperplasia, Endometrial Intra-epithelial Neoplasia, and Endometrial Cancer

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Survival benefit of para-aortic lymph node evaluation in endometrioid endometrial carcinoma

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Objective: To evaluate the 5-year survival in endometrioid endometrial carcinoma patients, who underwent

retroperitoneal pelvic lymph nodes (PLN) evaluation alone, compared to both pelvic and para-aortic lymph nodes (PPALN) evaluation.

Methods: This retrospective cohort study enrolled 654 women who were diagnosed with endometrioid endometrial carcinoma and underwent surgical staging at Siriraj Hospital, Mahidol University between January 2006 and December 2015. Patients with PLN evaluation (n=266) and patients with PPALN evaluation (n=388) were included. We excluded patients with no retroperitoneal lymph node evaluation, history of any cancer within 5 years, previously received chemotherapy or radiotherapy. All results were recorded and statistically analyzed.

Results: Mean follow-up time was 83.0 months. The 5-year overall survival (OS) in PLN and PPALN groups were 56.72 months (95% confidence interval [CI]=55.37–58.07) and 57.52 months (95% CI=56.57–58.47), respectively (p=0.096). The 5-year disease specific survival (DSS) in PLN group were 57.15 months (95% CI=55.84–58.45) in PLN group and 59.03 months (95% CI=58.44–59.61) in PPALN group, respectively (p=0.027).

Conclusion: The OS was not significantly difference between patients who underwent PPALN evaluation compared to patients who underwent PLN alone, although there was a trend to improve OS for patients with PPLAN. DSS was significantly better for patients who received PPALN evaluation compared to patients with PLN alone.

Poster (E16)

Endometrial Hyperplasia, Endometrial Intra-epithelial Neoplasia, and Endometrial Cancer

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Prevalence of occult endometrial carcinoma in patients with endometrial intraepithelial neoplasia underwent hysterectomy at Siriraj Hospital

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Objective: To determine the prevalence and pre-operative risk factors of occult endometrial carcinoma in the patients with endometrial intraepithelial neoplasia (EIN) who underwent hysterectomy at Siriraj Hospital.

Methods: One hundred and sixty EIN patients diagnosed between January 2007 and December 2020 were enrolled. Patients who did not undergo surgery as a primary treatment were excluded. All pathological slides were reviewed by one