fewer with combined chemo-radiation. Surgery was generally proceeded particularly in the patients who had responses or at least stable diseases to neoadjuvant treatment. Peri-operative outcomes after neoadjuvant treatment were superior compared to those of primary surgery whereas survival data were still inconsistent. Features which had or tended to have favorable prognosis were younger age, early-stage disease, response to neoadjuvant treatment, low pre-operative CA125, and optimal surgery. Among different modalities of neoadjuvant treatment which has become a frequent mode of treatment, neoadjuvant chemotherapy was more common than radiation therapy alone or chemoradiation.

Conclusion: Radiation therapy alone (of different modes) was used as a sole definitive modality of therapy particularly for early-stage diseases which limited to uterine body, cervix, with or without parametrial invasion. Among different modalities of neoadjuvant treatment, neoadjuvant chemotherapy was more common than radiation therapy alone or chemoradiation.

Poster (E25)

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

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Mismatch repair deficiency and real-world outcomes of immunotherapy in patients with endometrial cancer

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Objective: To investigate the clinicopathologic characteristics and the oncologic outcomes of immunotherapy in patients with endometrial cancer according to mismatch repair deficient (MMRd)/microsatellite instability (MSI) status.

Methods: We conducted a single-center retrospective analysis and a total of 215 endometrial cancer patients who underwent MMRd/MSI tests between January 2011 and March 2021 were included.

Results: Of the total 215 patients, 169 patients (78.6%) had mismatch repair proficient (MMRp)/microsatellite stable (MSS) tumors and 46 patients (21.4%) had MMRd/MSI tumors. Between 2 groups, distribution of histologic types and pathological stage were not statistically different ($p=0.469$ and 0.431 , respectively). A total of 68 out of 215 patients were tested for programmed death-ligand 1 (PD-L1), and PD-L1 expression was observed in 51.9% in MMRp/MSS group and 85.7% in MMRd/MSI group ($p=0.022$). The progression-free survival and overall survival rates

did not statistically differ between 2 groups. Eight patients were treated with pembrolizumab and objective response rate was 37.5%, comprised of 3 partial responses. Sixteen patients received lenvatinib/pembrolizumab and objective response rate was 31.3, comprised of 3 complete responses and 2 partial responses. Grade 3 or higher adverse events occurred in 18.8% (3/16) of those treated with lenvatinib/pembrolizumab.

Conclusion: In patients with endometrial cancer, although MMRd/MSI is associated with a higher PD-L1 expression rate than MMRp/MSS, there was no effect on progression and overall survival. In clinical practice, immunotherapy was safe and efficacious in recurrent endometrial cancer.

Poster (E26)

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

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Nomogram for microscopic lymph node metastasis in surgically staged endometrioid endometrial cancer patients

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Objective: To establish a nomogram for predicting microscopic lymph node (LN) metastasis in surgically staged endometrioid endometrial cancer (EC) patients.

Methods: Clinicopathologic data of presumed early-stage endometrioid EC patients ($n=338$) treated with lymphadenectomy between March 2000 and February 2018 were analyzed. The nomogram was developed based on multivariate logistic regression analysis of preoperative clinicopathologic data. The predicted and discriminative ability of the nomogram were evaluated by a concordance index and calibration curve. The high-risk group was predefined as having a predicted probability of LN metastasis $>50\%$.

Results: Thirty-four patients (10.1%) had microscopic LN metastasis. Multivariate analysis identified cancer antigen-125, myometrial invasion on magnetic resonance imaging (MRI), cervical stromal invasion on MRI as independent prognostic factors associated with LN metastasis. The concordance index of the nomogram was 0.818 (95% confidence interval= $0.793-0.935$), and calibration plots revealed good agreement between the observed probabilities and nomogram-

predicted probabilities (Hosmer–Lemeshow test, $p=0.818$). In the high-risk group ($n=34$), the predicted probability of LN metastasis was 53.0% and the actual rate of LN metastasis was 50.0%. In the low-risk group, 11 of 16 patients with LN metastasis had the tumor location in the cornu ($n=7$) and lower uterine segment ($n=4$).

Conclusion: Approximately 90% of presumed early-stage endometrioid EC patients may not require lymphadenectomy and this nomogram may provide valuable guidance for physicians on the lymphadenectomy. In the low-risk group, the tumor location including cornu and lower uterine segment should be investigated to determine whether to perform lymphadenectomy.

Poster (E27)

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

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Outcome of therapeutic lymph node dissection for stage IIIC2 uterine cancer

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Objective: The purpose of this study was to compare the treatment outcomes of stage IIIC2 uterine cancer in our department by histological type.

Methods: Thirty-three cases of stage IIIC2 uterine cancer in which lymph node dissection (LND) was performed at our department from 2006 to 2017 were included in this study. LND was conducted with sharp dissection between the vascular sheath and the adventitia of the vessels. Para-aortic lymph node (PAN) biopsy cases were excluded. Postoperative adjuvant chemotherapy was administered. The histological types were divided into estrogen-dependent Type I (endometrioid, grade 1 to 3), estrogen-independent type II, and carcinosarcoma, and the overall survival times were compared.

Results: The median (range) number of PAN metastases was 2 (1–15), 4 (1–19), and 4 (2–34), respectively. The median number of pelvic lymph node metastases was 2, 4, and 3, respectively. There were no cases of postoperative chylous ascites. Three cases of type I, 3 cases of type II, and all cases of carcinosarcoma recurred. The 5-year survival was 76% overall, 89% for type I, 78% for type II, and 33% for carcinosarcoma. There was no significant difference among the 3 groups, but there was a significant difference between the 2 groups of type I and type II

+ carcinosarcoma group.

Conclusion: With our systemic LND, the 5-year survival rate for stage IIIC2 type 1 patients with a median of 2 positive PANs was as high as 89%. Our sharp LND is safe and has high therapeutic value.

Poster (E28)

Gestational Trophoblastic Neoplasia

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Persistent low concentration hCG in gestational trophoblastic neoplasia with history of 7 series methotrexate

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Objective: Persistently low concentration of human chorionic gonadotropin (hCG) may be associated with false-positive hCG, quiescent gestational trophoblastic disease and pituitary hCG. The knowledge about it, is needed to give the best option to the patient.

Methods: This is a case report of patient Mrs. GM, 24-year-old, with history of referred from Secondary Public Hospital with gestational trophoblastic neoplasia (GTN). The patient had a history of curettage due to molar pregnancy in February 2018, without any hCG level data stated before curettage. We evaluated the hCG measurement after curettage, during single agent chemotherapy methotrexate (MTX) and after unresponsiveness single agent chemotherapy MTX.

Results: Mrs. GM's hCG level before single-agent chemotherapy was 260.7 IU/mL. She underwent single-agent chemotherapy MTX for 7 consecutive series. The hCG levels (mIU/mL) during single-agent were 37.2, 14.7, 6.3, 6.4, 5.7, 4.6 and 5.1. The hCG level after the 7th MTX increased to 5.1 mIU/mL. Therefore, the patient was sent to Dr. Cipto Mangunkusumo National Central Referral Hospital (RSCM) due to unresponsiveness to single-agent chemotherapy on GTN. No complaint, neither any remarkable findings on physical examination in RSCM. Internal genitalia was normal in abdominal and trans-vaginal ultrasound. We also found normal chest X-ray examination. The patient was diagnosed with false-positive hCG and planned for continuing hCG observation. After 2 to 4 months of observation, the hCG level decreased to 4 mIU/mL, 4.3 mIU/mL and 2.46 mIU/mL.

Conclusion: The hCG levels returned to normal and further chemotherapy was no longer needed.