

EP164/#666

DOES PERINEPHRIC FAT PREDICT SURGICAL COMPLICATIONS AND SURVIVAL IN INDIVIDUALS WITH ENDOMETRIAL CANCER?

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Introduction The aim of this study was to evaluate the association between average perinephric fat (APF) and surgical complications and survival in individuals with endometrial cancer (EC).

Methods This is a retrospective cohort study of individuals with EC who underwent surgical staging in a tertiary cancer centre in Canada (2015 – 2021). AFP was measured on pre-operative CT scans. Baseline characteristics, surgical complications and survival data were compared between patients with APF < 2.2 cm and those with APF ≥ 2.2 cm. Cox proportional hazard model was used to evaluate the association between APF and overall survival (OS) and progression-free survival (PFS).

Results Overall, 297 patients were included. Of whom, n=271 had APF <2.2 cm and n=26 had APF ≥ 2.2 cm. Baseline characteristics are presented in table 1. Patients with APF ≥ 2.2 cm had higher rates of failed sentinel lymph node mapping (31% vs 6%, p<0.001). There were no differences between groups in intraoperative (3% vs 4%, p=0.61) and postoperative complications (14% vs 19%, p=0.71). On univariable analysis, APF was not associated with OS (HR 1.58, 95% CI 0.90–2.78, p=0.11). However, increase in APF was significantly associated with worse PFS (HR 1.49, 95% CI 1.08–2.06, p=0.02). In a multivariable analysis including age, stage, LVSI and deep myometrial invasion, the association between APF and PFS was not statistically significant (HR 1.35, 95% CI 0.96–1.91, p=0.08).

Conclusion/Implications In this cohort of individuals with EC, there was a trend towards worse PFS with increased APF. However, increased APF did not impact perioperative complications or OS.

EP165/#31

LAPAROSCOPIC SLN DETECTION IN PATIENTS WITH ENDOMETRIAL CANCER. EXPERIENCE IN KAZIOR

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Introduction In Republic of Kazakhstan, endometrial cancer among malignant tumors occupies the 9th ranking position, and in the structure of gynecological cancer, the 3rd place, about 1000 cases of this disease are detected annually. The main method of treatment for EC is surgical treatment, with mandatory removal of regional lymph nodes (LN) for preventive purposes, regardless of their morphological state. However, prophylactic lymphadenectomy did not justify itself. Plenty of evidence suggests an improvement in survival only in groups of patients who have been diagnosed with metastatic changes in the lymph nodes.

Methods In the period from January 1, 2021 to December 30, 2021, 37 patients with detection of sentinel lymph nodes were registered in KazIOR. We collected retrospective data from history of diseases.

Results The mean age of the patients was 52 years. The average body mass index of patients was 30.2 kg/m². Preoperative assessment of endometrial cancer risk groups showed: low risk in 19 (51.3%) patients, intermediate risk in 11 (29.7%) patients, high risk in 7 (18.9%) patients. Complete pelvic and para-aortic lymph node dissection was performed in 7 (18.9%). In 30 (81%) patients, at least one sentinel lymph

Abstract EP164/#666 Table 1 Baseline characteristics

Variable	AFP < 2.2 cm (n=271)	AFP ≥ 2.2 cm (n=26)	P value
Age at diagnosis, median, years	64.3 (28.7, 89.3)	70.2 (55.2, 83.5)	0.004
Diabetes, n (%)	57 (22)	13 (50)	0.003
Hypertension, n (%)	110 (42)	21 (81)	<0.001
Dyslipidemia, n (%)	43 (16)	9 (35)	0.003
BMI, median, kg/m ²	29.6 (16.1, 65.0)	37.2 (28.6, 56.9)	<0.001
Average subcutaneous fat, median, cm	3.0 (0.7, 7.3)	3.2 (1.4, 7.9)	0.39
Stage of disease: n (%)			0.92
I	206 (76)	19 (73)	
II-IV	65 (24)	7 (27)	
Histology: n (%)			0.13
Endometrioid	157 (59)	19 (76)	
Other	107 (41)	6 (24)	

node was successfully mapped. 7 (18.9%) patients had positive nodes. In 37 patients, no postoperative complications were detected. The final histology revealed: 31 (83.7%) patients had endometrioid adenocarcinoma, 6 (16.2%) had clear cell carcinoma.

Conclusion/Implications This study confirms the feasibility of the SLN procedure to assess recurrence risk in patients with early EC and the safety of sentinel lymph node detection.

EP166/#912

PREVALENCE OF PARAAORTIC LYMPH NODE METASTASIS IN PRESUMED CLINICAL STAGE II ENDOMETRIAL CANCER

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Introduction The aim of this study was to investigate the prevalence of paraaortic lymph node (LN) metastasis in patients with endometrial cancer, whose preoperative clinical stage was assumed to be FIGO stage I.

Methods We retrospectively analyzed the medical records of 462 patients who underwent surgical staging for endometrial cancer at Yonsei Cancer Center from July 2014 to April 2021. The study population consisted of patients with clinical presumed stage I endometrial cancer and who underwent nodal assessment, including both pelvic and paraaortic LNs.

Results A total of 311 patients met the eligibility criteria for the study. They were classified into low/intermediate and high-risk groups based on histology and myometrial invasion. Of the total patients, 66.9% were classified as low/intermediate risk group, while 33.1% were classified as high-risk group. After surgical staging, 28 patients (9.0%) were upstaged, and 12 patients (3.9%) were found to have LN metastasis. The incidence of LN metastasis was higher in the high-risk group (6.8%) than in the low/intermediate risk group (2.9%). However, the pattern of LN metastasis did not differ between the two groups (pelvic and paraaortic LN metastasis: 16.7% vs. 14.3%; pelvic only: 50% vs. 57.1%; paraaortic only: 33.3% vs. 28.6%, in the low/intermediate vs. high-risk group, respectively).

Conclusion/Implications The incidence of paraaortic LN metastasis in endometrial cancer patients presumed to be FIGO stage I by preoperative radiologic evaluation is low. However, our findings emphasize the importance of nodal assessment, particularly in high-risk groups, as a significant number of patients were upstaged and found to have LN metastasis.

EP167/#641

SENTINEL LYMPH NODE MAPPING USING INDOCYANINE GREEN DYE AND NEAR INFRARED FLUORESCENCE IMAGING METHOD FOR EARLY STAGE ENDOMETRIAL AND CERVICAL CANCER

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Introduction This study aimed to assess the feasibility and effectiveness of using ICG to detect SLNs & to investigate

how patient and tumor-related factors may influence this process in patients with endometrial and cervical cancer in low-middle income country like India.

Methods Patients with early stage cervical and endometrial cancer who underwent primary surgery with SLN identification using ICG Dye between July 2020 and March 2022 were analysed. Bilateral and overall SLN detection rates were calculated and univariate analysis was performed to estimate factors associated with SLN identification failure.

Results 49 patients with endometrial and cervical cancer were included in the study. Successful SLN identification was done in 46 out of 49 patients (93.87%). Unilateral and bilateral detection rate was 89.79% & 83.67% respectively. Sensitivity, Specificity, False Negative Rate, Accuracy of SLN identification using ICG dye was 83.33%, 95.34%, 16.67%, 93.87% respectively. Negative predictive value of this test was 97.6%. In our study, myometrial invasion in endometrial cancer (p = 0.44), LVI (with LVI p=0.12), Grade of tumor (higher grade, p = 0.26), menopausal status (postmenopausal, p = 0.09), tumor size (>4 cm, p=0.62), & Histopathology (adenocarcinoma, p = 0.157) have association with decrease SLNs identification, but it did not found statistically significance. Only BMI (>30) is found to be statistically significant to prove correlation between Obesity and SLN identification failure (p = 0.025).

Conclusion/Implications SLN identification using NIR fluorescence with ICG dye appears to be accurate method in our patients with early stage cervical or endometrial carcinoma. BMI is to be considered as an important factor for decrease SLN identification.

EP169/#411

MACHINE LEARNING METHOD FOR DIFFERENTIAL DIAGNOSIS AND PROGNOSIS PREDICTION FOR EARLY-STAGE UTERINE SARCOMA USING PREOPERATIVE BLOOD BIOMARKER AND AGE

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Introduction Preoperative differential diagnosis of clinical stage I uterine sarcoma (US) is essential for surgical intervention. Many studies have been done using CT or MRI imaging for machine learning prediction models but not with blood biomarkers. We aimed to develop a new model for diagnosis and prognosis prediction in the US using preoperative blood biomarkers and patient age.

Methods Overall, 143 US patients and 210 benign uterine myoma (UM) patients were randomly assigned to the 'training and test' cohort. 78(55%) cases were on clinical stage I. 30 preoperative peripheral blood parameters and patient's age was surveyed. The Random Forest (RF) classifier was used to construct an algorithm. The accuracy, the area under the receiver operating characteristic curve (AUC), and the variable