Methods All patients with stage I EC, negative LVSI and negative peritoneal washings, who underwent surgical staging at our institution between 01/2006–12/2016 were retrospectively reviewed. Appropriate statistical tests were employed.

Results We identified 1458 patients: median age 60 years (range, 27–92), median BMI 30 (range, 15–68), diabetes mellitus (DM)- 12%, invasion<50%- 96%, invasion≥50%- 4%, grade 1-2- 79%, grade 3- 21%, endometrioid- 85%, non-endometrioid- 15%, adjuvant radiotherapy- 30%, adjuvant chemotherapy- 12%. Median follow-up time was 29 months (range, 1–149). Overall 2-year disease specific survival rate (DSS) was 98.6% (SE 0.4%). On univariable analysis, non-endometrioid histology was associated with worse DSS compared with endometrioid histology (95.4% [SE 1.5%] vs 99.3% [SE 0.3%], p=0.001). DOI, race, BMI and surgical approach (minimally invasive vs open) did not correlate with DSS. On multivariable analysis, grade, DM and age were the only independent factors significantly associated with DSS (grade 3 vs grade 1–2: DSS 95.3% [SE 1.3%] vs 99.6% [SE 0.2%], p<0.001, HR 6.7 [95% CI 2.6–17.2]; DM vs non-DM: DSS 98.0% [SE 1.4%] vs 98.6% [SE 0.4%], p=0.001, HR 2.7 [95% CI 1.3–5.6]; age≥65 vs age<65: 97.8% [SE 0.8%] vs 99.0% [SE 0.4%], p<0.001, HR 2.3 [95% CI 1.2–4.5]).

Conclusions Disease specific survival of patients with stage I endometrial cancer without lymph-vascular invasion is determined by histologic grade, diabetes mellitus and age, but not by depth of invasion.

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CA-125 PREDICTS NODAL AND DISTANT METASTASES IN PREOPERATIVE STAGE I LOW-RISK ENDOMETRIAL CANCER

L. Nobrega*, R. Reis, C. Andrade, R. Schmidt, M. Vieira. Barretos Cancer Hospital, Gynecologic Oncology Department, Barretos, Brazil

Objectives This study aims to estimate the serum CA-125 concentration as a predictor of nodal and distant metastases in preoperative stage I Endometrial Cancer (EC).

Methods Medical record review was conducted on preoperative imaging-based stage I EC patients who underwent lymphadenectomy between January 2014 and December 2017 in a reference cancer center in Barretos, Brazil. Preoperative CA-125 levels were evaluated to quantify the predictive ability of nodal or distant metastases by Mann-Whitney test and receiver operating characteristic (ROC) curve.

Results A total of 146 EC cases were included: 104 (71.2%) stage IA and 42 (28.8%) stage IB with mean age of 61.75 (8.5) years and body mass index (BMI) of 31.6 (6.2) kg/m². Sentinel lymph node mapping was performed in 96 (65.75%) patients; while 86 (58.9%), 84 (57.33%) and 56 (38.36%) underwent left, right pelvic and retroperitoneal systematic lymphadenectomy, respectively. Low-risk EC, comprising endometrioid G1 and G2, was present in 82 (56.2%) and
high-risk disease (endometrioid G3, serous, clear cell, and carcinosarcoma) in 64(43.8%). After oncological surgery, nodal and/or distant metastases were found in 18(12.3%) cases. CA-125 levels were higher in low-risk women with pathological evidence of dissemination, compared to non-metastatic disease [24.86(20.4-56.5) vs. 11.4(7.0-17.80)U/mL, p<0.001], with a sensitivity of 85.71% and specificity of 83.56%, at a concentration threshold of 19.55U/mL (AUC=0.86, p=0.002). CA-125 values did not attain statistical difference in high-risk patients for prediction of metastasis (p=0.51).

Conclusions CA125 levels are elevated in low-risk EC patients with nodal and/or distant metastases. Further studies are warranted to substantiate these findings and possibly favor CA-125 as a parameter for an individualized surgical approach.

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**ENDOMETRIAL STROMAL SARCOMA-HOW TO TREAT RECURRENCE?**

1S Kadir, 2S Pervin*. 1Assistant registrar, Gynaec oncology- National Institute of Cancer Research Hospital, Dhaka, Bangladesh; 2National Institute of Cancer Research Hospital, Gynaec oncology, Dhaka, Bangladesh

Objectives Endometrial stromal sarcoma(ESS) is a rare gynecological malignancy accounting only.2percent of uterine neoplasm. According to WHO, one third of the ESS recurs. But there is no protocol to treat recurrent ESS. This study is to find out a standard protocol of treatment incase of recurrent endometrial stromal sarcoma.

Methods Its a retrospective study of nineteen patients of ESS attending NICRH. All had hysterectomy outside our hospital and came with histopathology report of ESS. Time period was three years (2016-2018).

Results The recurrence rate of nineteen cases were 42.1 percent. The median age of diagnosis was 47.55 years and median time of first relapse was 9 months. The number of recurrence ranges from 1 to 5. Incase of first relapse, second surgery was done in eight patients but three had third relapse. Out of eleven patients who received adjuvant chemotherapy, six had relapse and out of seven patients who had adjuvant radiation, five had recurrence. As all primary histopathology was done outside NICRH, grade was undetermined in eleven patients. Out of four high grade patients, three had relapse. Incase of four low grade, two received aromatase inhibitor and they remain relapse free.

Conclusions In our study, it is clear that neither secondary cytoreduction nor adjuvant chemoradiation can prevent recurrence. There is limited data of immuno or target therapy. So long term multicentric study should be performed to set up a standard guideline of treatment in case of recurrent endometrial stromal sarcoma.

**Abstract 415 Figure 1**

Endometrial cancer is the most common malignant tumours of the female sexual organ, its incidence has been on the rise for many years. To date, there is no reliable diagnostic marker of this disease.

The aim of the study was to evaluate the levels of HE4 protein in women with endometrial cancer and in women with uterine fibroids and to refer the results to healthy women of the same age.

Median HE4 protein in women with endometrial cancer (n=30) was 55.5 U/ml (mean ± standard deviation 75.9 ± 50.2) and was statistically significantly higher compared to women with uterine fibroids (n=30) (36.9, 40.8 ± 18.7) and healthy women of the same age (n=50) (22.5, 23.1 ± 5.1). The HE4 concentration in women with endometrial cancer increases with the depth of endometrium infiltration described in the histopathological examination. In the group of patients with endometrial cancer, three positive linear correlations were confirmed: between the preoperative blood erythrocyte concentration and the HE4 protein concentration, between the pre-operative potassium ion concentration and the HE4 protein concentration as well as between the INR measured after surgery and the HE4 protein concentration.

The authors conclude that endometrial cancer is a strong stimulus inducing the synthesis of HE4 proteins, the synthesis depends on the depth of endometrium infiltration. HE4 concentrations may be affected by higher concentrations of erythrocytes, INR and potassium. This suggests a higher value of HE4 as a cancer marker for women with endometrial cancer without comorbidities.