genetic features (POLE mutation [POLEmt], microsatellite instability high [MSI-H], homologous recombination defect [HRD], MUC16 mutation [MUC16mt]) showed significant overlap. In Kaplan-Meier survival analyses, MIS and open surgery brought similar survival outcome in patients with POLEmt, MSI-H, HRD or MUC16mt. But in POLE wild type, non MSI-H, non HRD, or MUC16 wild type patients, MIS resulted in shorter recurrence-free survival (RFS) ($p=0.008$, 0.015 , 0.003 , 0.008). Based on TCGA classification, POLE ultramutated and MSI hypermutated type had similar prognosis after two surgeries, while copy-number low type without CTNNB1 mutation and copy-number high type with TP53 mutation showed more rapid recurrence after MIS ($p=0.048$ and 0.037). Further analyses were done to simplify the model. In patients with ≥ 1 of the 4 features (POLEmt, MSI-H, HRD or MUC16mt), MIS and open surgery brought comparable overall survival and RFS ($p=0.339$ and 0.969); for patients with none of the features, especially those with wild type CTNNB1 or TP53 mutation, longer RFS was observed in open surgery group ($p=0.001$, <0.001 , <0.001 , respectively). All the results of Kaplan-Meier analyses were verified by Cox regressions.

Conclusion The molecular features of EC are related to patients' prognosis after different surgical approaches. MIS should be recommended in patients with POLEmt, MSI-H, HRD or MUC16mt for similar survival outcome and less peri-operative complications compared to open surgery.

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119 THE POSITIVE PELVIC LYMPH NODES IN ENDOMETRIAL CANCER – HISTOPATHOLOGICAL PARAMETERS AS PREDICTORS

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Introduction/Background Endometrial cancer is the most common malignancy of the female reproductive tract. Lymph node metastases are an important prognostic factor in endometrial cancer. Several prognostic factors have been shown to correlate with lymph node metastasis: depth of myometrial invasion, cervical infiltration, histologic grade of the tumor, tumor diameter, serous histology, lymphovascular invasion, and positive peritoneal cytology.

Methodology Finding the pathohistological parameters that will indicate with greater certainty the possibility of metastases in the lymph nodes, on the basis of which it will be evaluated whether such patients should undergo lymphadenectomy or not. A retrospective analysis of patients with endometrial cancer who underwent surgery at the Oncology Institute of Vojvodina (Clinic for Operative Oncology – Department of Gynecology) in the period from 2012 to 2018. The study

included 120 patients who underwent hysterectomy with bilateral adnexectomy and pelvic lymphadenectomy.

Results Among patients who had lymph node metastases, there were statistically significant more patients ($p < 0.01$) with endometrial cancer of histological type 2, with depth of myometrial invasion greater than 50%, cervical stroma infiltration, lymphovascular invasion, and positive peritoneal cytology.

Conclusion Histopathological parameters such as type 2 endometrial cancer, myometrial invasion depth greater than 50%, cervical stroma infiltration, lymphovascular invasion and positive peritoneal cytology increase the chances of lymph node metastases. Tumor size (> 2 cm) as well as histologic grade did not correlate with a higher incidence of lymph node metastases. In this study, both the parametrial infiltration and the number of lymph nodes removed have clinical significance, but not statistical significance.

165 AN AUDIT OF THE USE OF VAGINAL BRACHYTHERAPY IN ENDOMETRIAL CANCERS

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Introduction/Background Vaginal Brachytherapy is an effective treatment modality to prevent local recurrence in endometrial cancers. We did an audit of the Endometrial cancer cases treated by an oncology group practice over a period of 5 years to assess the use of VBT.

Methodology The data of 106 patients treated for endometrial cancers between 2014 and 2019 by an oncology group across 2 tertiary care centres was retrospectively analysed.

The indications of vaginal brachytherapy, number of fractions, dose per fraction, prescription points, vaginal stenosis on follow up and use of vaginal dilators were the variables collected and were entered in an excel sheet.

Results A total of 106 patient data was entered and analysed. The mean age of the patients was 60 years. The radiotherapy details were available for 84 patients. Of the 84 patients analysed, 59 patients (70%) received adjuvant Vaginal Brachytherapy, while 25(30%) did not. Of the patients who received VBT, 32 (54.2%) patients received VBT as a boost after Pelvic RT (figure 1).

VBT BOOST: Among the 32 patients who received vaginal Brachytherapy as a boost after Pelvic RT, only 4(12.5%) patients had cervix involvement. Lower uterine segment was involved in 12 patients.

The EBRT dose was 45- 50 Gy in 25 to 28 fractions.

Abstract 165 Table 1 The stagewise and grade wise numbers

STAGE	NUMBER
IA,G1	6
IA,G2	3
IA,G3	5
IB,G1	4
IB,G2	3
II	2
III A	1

■ VBT ■ VBT BOOST

Abstract 165 Figure 1

Percentage of patient receiving only VBT and VBT boost after pelvic RT only VBT:

The stage distribution of the patients who underwent only VBT was as follows (figure 2 and table 1).

■ IA ■ IB ■ II ■ IIIA

Abstract 165 Figure 2

The common dose fractionations for VBT were 25 Gy/5 #, 24 Gy/4# and 21 Gy/3#; weekly #s. Majority of the prescriptions were to the vaginal mucosa.

There was no standard documentation of vaginal shortening. The use of vaginal dilators was scarce.

Conclusion There was a substantial percentage of women who received VBT in the low risk group. A survey among the consultants showed that poor follow up and the lack of patient awareness, as the reason behind this. Patients operated at peripheral centres ended up having VBT in the low risk group. Lower uterine segment involvement seems to be a factor tipping the decision towards VBT. The use of VBT boost after Pelvic Radiotherapy, has been seen in about 88% of the

patients without the involvement of cervix, warranting a national consensus guideline for these tumours.

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ROBOTIC CORPUS CANCER SURGERY: TEN YEAR MORTALITY DATA FROM THE UK EPICENTRE IN GUILDFORD

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Introduction/Background The European Society of Gynaecological Oncology(ESGO) and The British Gynaecological Cancer Society(BGCS) recommend laparoscopic surgery for treatment of endometrial cancer. Conversion rates to open can be high when performing surgical staging, particularly in patients with high BMI. The Royal Surrey in Guildford has been performing laparoscopic surgery for endometrial cancer since 2002 and introduced robotic assistance in January 2010. Since then >1400 gynaecological oncology robotic procedures have been performed: the greatest experience in the UK.

Objective Assess surgical outcomes and survival for endometrial cancer since robotic surgery was introduced.

Methodology Retrospective cohort study of surgical treatment for corpus cancer using data collected prospectively on a dedicated database between 1st January 2010 and 31st December 2019. Conversion rate to laparotomy(%), estimated blood loss in ml(EBL), mean and median length of stay(LOS) and 30-day mortality rate(n,%) were calculated.

Results 952 patients received primary surgery for corpus cancer between 2010–2019

Robotic: 734 operations, conversion rate 0.54% Median EBL 50 ml. Median LOS 1 day, 30-day Mortality 1/734 (0.14%) Open: 164 operations, Median EBL 500 ml, Median LOS 6 days, 30-day Mortality 5/164(3.05%).

In 2019 115/126(91%) of all operations performed for corpus cancer were performed using the Da Vinci Robot with 9 open. Between 2008 and 2019 the median length of stay for patients with corpus cancer fell, from 6 days to 1

Abstract 254 Figure 1