Abstracts

#400 SENSITIVITY AND SPECIFICITY OF SENTINEL LYMPH NODE BIOPSY IN PREDICTING LYMPH NODE METASTASIS IN ENDOMETRIAL CARCINOMA

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Introduction/Background Background Gynecological cancers are one of the most common cancers worldwide and one of the most common cause of death in women. SENTIENDO SHREC and FIRES trial prove that Sentinel lymph-node biopsy in endometrial cancers is valid option and validated procedure and it is an alternative to routine systematic pelvic and para aortic Lymphadenectomy and there by it also reduces the chances of complications of lymphadenectomy like lymphorrhea, lymphocyst and lymphedema.

Aims and objective To assess the successful mapping, sensitivity and specificity of the sentinel node biopsy in predicting lymph node metastasis in endometrial cancer

Methodology It is a prospective observational study of 2 years done in AHPGIC. Patients with endometrial cancer was attended at OPD and included by inclusion and exclusion criteria. All the included patients underwent sentinel node procedure by ICG only and strictly adhered to MSKCC protocol. All the patients also underwent routine systematic lymphadenectomy as indicated. Both the sentinel node biopsy and routine lymph node biopsy was to be examined by pathology without the help of ultrastaging to analyse the sensitivity and specificity of the sentinel node biopsy and validation of the sentinel node technique.

Results Result Total 27 ca endometrium cases were included. Successful mapping was seen in 92.5% cases and bilateral mapping in 78% cases. Sensitivity, specificity and NPV were 83%, 100%, 95.4% respectively. Most common nodes identified as sentinel nodes were external iliac and obturator node.

Conclusion Conclusion sentinel lymph node analysis in ca endometrium is a safe and effective procedure. The technique is now validated in our institute.

Disclosures This study has no conflict of interest from any author. No funds were required separately for this study.

#401 MAGNETIC RESONANCE IMAGING -RADIOMICS IN ENDOMETRIAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction/Background Endometrial carcinoma is the most common gynecological tumor in developed countries. Clinical-pathological factors and molecular sub-types are used to stratify the risk of recurrence and to tailor adjuvant treatment. The main limitation of molecular and clinicopathological prognostic factors is the need of post-operative surgical specimens, obtained through comprehensive surgical staging. Since preoperative endometrial sampling performed for tumor diagnosis represents the collection of only a portion of the whole tumor, it may result in sampling errors. The present study aims to assess the role of radiomics analysis in preoperatively predicting molecular or clinical-pathological prognostic factors in patients with endometrial carcinoma.

Methodology Literature was searched for manuscripts reporting radiomics analysis in assessing diagnostic performance of Magnetic Resonance Imaging (MRI) for different outcomes. Diagnostic accuracy performance of risk prediction models was pooled using the metandi command in Stata.

Results A search of MEDLINE (PubMed) resulted in 153 relevant articles. Fifteen articles met inclusion criteria, for a total of 3608 patients. MRI showed pooled sensitivity and specificity 0.785 and 0.814, respectively in predicting high grade endometrial carcinoma, deep myometrial invasion (pooled sensitivity and specificity 0.743 and 0.816, respectively), lymphovascular space invasion (pooled sensitivity and specificity 0.656 and 0.735, respectively), nodal metastasis (pooled sensitivity and specificity 0.831 and 0.736, respectively).

Conclusion Preoperative MRI-radiomics analyses in patients with endometrial carcinoma is a good predictor of tumor grading, deep myometrial invasion, lymphovascular space invasion, and nodal metastasis.

Disclosures there are no conflicts of interest.

#403 THE IMPACT OF A PREHABILITATION AND ENHANCED RECOVERY AFTER SURGERY (ERAS) PROGRAM ON PATIENTS UNDERGOING SURGERY FOR ENDOMETRIAL CANCER

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Introduction/Background Enhanced recovery after surgery (ERAS) and prehabilitation programs are multidisciplinary care pathways that aim to optimize patients’ physical fitness prior to surgery and mitigate the detrimental effects of surgical stress, in order to improve recovery after surgery. This study aimed to assess the impact of introducing a prehabilitation
and ERAS program for patients who were undergoing surgery for endometrial cancer on their post-operative outcomes.

**Methodology** In this prospective, single-center study we evaluate a cohort of consecutive patients undergoing surgery for endometrial cancer who followed a prehabilitation and ERAS program. Post-operative outcomes of these patients were compared to those of a retrospective cohort of patients who underwent surgery for endometrial cancer before the implementation of this program.

**Results** In total 307 patients were included: 35 patients that followed the ERAS-prehabilitation program and 272 patients who had surgery before the implementation of the program, between 2010–2018. There were no significant differences in clinic-demographic or tumor characteristics, neither in type of surgery performed between the study groups. In the ERAS-prehabilitation group, compliance rate exceeded 80% in all proposed pre-operative interventions, while compliance only exceeded 80% in 9 out of 15 intra-operative and 3 out of 7 post-operative interventions. The ERAS-prehabilitation group had shorter hospital-stay (3 vs. 4 days; p<0.001). There were no differences between groups regarding blood loss, need for blood transfusion, complication rate or need for reintervention.

**Conclusion** The implementation of an ERAS-prehabilitation program for patients undergoing surgery for endometrial cancer is feasible and highly accepted by patients, with high compliance rates to pre-operative interventions. Compliance rate to intra and post-operative interventions is still suboptimal, highlighting the need for training of health-care professionals involved in the care of these patients. Even with suboptimal compliance rates, a prehabilitation-ERAS program could significantly reduce hospital stay, without increasing the complication rate or need for reintervention.

**Disclosures** The authors have no conflicts of interest.

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**Abstract #403**

**Table 1** Patients characteristics, surgical and post-operative outcomes in patients who followed the ERAS-prehabilitation program and patients who had surgery before the implementation of the program.

<table>
<thead>
<tr>
<th>Patients and tumor characteristics</th>
<th>ERAS n=327</th>
<th>NO-ERAS n=272</th>
<th>Total n=307</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean, SD)</td>
<td>63.7 ± 11.9</td>
<td>60.5 ± 12.2</td>
<td>62.1 ± 11.9</td>
<td>0.166</td>
</tr>
<tr>
<td>BMI (mean, SD)</td>
<td>25.4 ± 5.2</td>
<td>25.0 ± 5.1</td>
<td>25.2 ± 5.1</td>
<td>0.256</td>
</tr>
<tr>
<td>Karnofsky (median, min-max)</td>
<td>90 (60-100)</td>
<td>90 (60-100)</td>
<td>90 (60-100)</td>
<td>0.827</td>
</tr>
<tr>
<td>ASA score [n, %]</td>
<td>0 (0/0)</td>
<td>0 (0/0)</td>
<td>0 (0/0)</td>
<td>0.070</td>
</tr>
<tr>
<td>I</td>
<td>0 (0/0)</td>
<td>0 (0/0)</td>
<td>0 (0/0)</td>
<td>0.070</td>
</tr>
<tr>
<td>II</td>
<td>29 (32.4%)</td>
<td>15 (5.6%)</td>
<td>44 (14.3%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>III</td>
<td>74 (82.5%)</td>
<td>181 (66.6%)</td>
<td>255 (83.2%)</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>1 (1.2%)</td>
<td>3 (1.1%)</td>
<td>4 (1.3%)</td>
<td></td>
</tr>
<tr>
<td>Comorbidities (median, min-max)</td>
<td>7 (3-19)</td>
<td>7 (3-17)</td>
<td>7 (3-17)</td>
<td>0.019</td>
</tr>
<tr>
<td>Pre-operative complications</td>
<td>3 (0-21)</td>
<td>2 (0-14)</td>
<td>2.5 (0-15)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Radiotherapy (mean, SD)</td>
<td>6 (0-15)</td>
<td>6 (0-15)</td>
<td>6 (0-15)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Lymph nodes retrieved (mean, SD)</td>
<td>26 (0-60)</td>
<td>26 (0-60)</td>
<td>26 (0-60)</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

**Abstract #411**

**The Role of Vaginal Brachytherapy in the Treatment of Endometrial Cancer**

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**Introduction/Background** Tandem vaginal brachytherapy applied immediately after pelvic curative radiotherapy is a treatment that aims to destroy endometrial cancer cells and reduce the risk of recurrence. This study retrospectively evaluated patients with endometrioid-type endometrial adenocarcinoma and those receiving adjuvant therapy to evaluate the efficacy of brachytherapy compared to standard external beam radiation therapy.

**Methodology** A total of 116 patients who underwent comprehensive surgical staging for endometrial type endometrial cancer at Zeynep Kamil Women and Children’s Diseases Training and Research Hospital between January 2014 and January 2020, and were given adjuvant treatment, were included in our study. Data included patients’ age, tumor size, FIGO grade, FIGO stage, myometrial invasion (<50, ≥50), lymphovascular invasion (present/absent), and total number of lymph nodes removed from pelvic±paraortic dissection. Type of surgery (laparoscopy/laparotomy), duration of follow-up (months), type of adjuvant treatment (pelvic radiotherapy ±brachytherapy, chemotherapy, chemoradiotherapy), type of recurrence (local/systemic), recurrence date (month/year), the cause and date (month/year) of death were extracted from hospital records. Statistical analysis was performed using IBM SPSS for Windows, Version 25.0.

**Results** The mean age of patients was 58.5 ± 0.9 years. Ninety patients received radiotherapy and 20 patients received chemotherapy + radiotherapy. Median follow-up time was 44.5 (15–86) months. During follow-up, 11 (10%) patients had recurrence and death occurred in 5 (5%) patients. Age (p=0.293), tumor diameter (p=0.560), FIGO grade (p=0.070), myometrial invasion (p=0.132), lymphovascular space invasion (p=0.266) did not differ between patients receiving only external radiotherapy (ERT) and vaginal brachytherapy (VBT) and/or ERT. A significantly lower rate of recurrence was found in the VBT group (p=0.038, table 1).

**Conclusion** The implementation of an ERAS-prehabilitation program for patients undergoing surgery for endometrial cancer is feasible and highly accepted by patients, with high compliance rates to pre-operative interventions. Compliance rate to intra and post-operative interventions is still suboptimal, highlighting the need for training of health-care professionals involved in the care of these patients. Even with suboptimal compliance rates, a prehabilitation-ERAS program could significantly reduce hospital stay, without increasing the complication rate or need for reintervention.

**Disclosures** The authors have no conflicts of interest.