P70 DESCRIPTION OF THE SURGICAL MANAGEMENT OF PATIENTS WITH UTERINE CORPUS CANCERS IN BELGIUM: RESULTS FROM A MULTICENTRIC PROSPECTIVE OBSERVATIONAL STUDY (EFFECT)

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Introduction/Background Uterine corpus cancer is the most frequent pelvic gynecological cancer in Belgium, however the adherence to the management guidelines is widely heterogeneous. In order to assess the quality of management, the EFFECT (EFFectiveness of Endometrial Cancer Treatment) project was initiated by the Anticancer Fund. Here we report the results regarding the surgical management of the patients included in EFFECT.

Methodology Patients with uterine malignant tumors diagnosed between 2012 and 2016 were registered prospectively and on a voluntary basis in an online secured database hosted by the Belgian Cancer Registry (EFFECT study). Data on pathologic assessment, preoperative management, surgery, adjuvant treatment and follow-up were collected. We present the demographic characteristics, pathological assessment and surgical management of the whole study population.

Results Overall, 4037 new cases were registered by 59 participating centers. The mean number of patients treated by each center was 65, 14 centers registered more than 100 patients during the whole period. The median patients' age was 69 years (range, 22–98 years). 95,5% of operated malignant tumors were carcinomas, 4,5% were sarcomas. 78% of the patients with a carcinoma and 75% of the sarcomas were FIGO stage I. 56% of operated patients were treated by minimally invasive surgery (laparoscopy or robotic-assisted laparoscopy), 36% by laparotomy and 7% by exclusive vaginal surgery. 44% of the operated patients had surgical lymph node staging (72% pelvic lymphadenectomy, 2% para-aortic lymphadenectomy, 22% pelvic and para-aortic lymphadenectomy). The median number of pelvic nodes resected was 17 (0–73) and for para-aortic nodes 11 (0–84).

Conclusion Only half of the patients with clinical stage I were operated by minimally invasive surgery, 7% of patients were operated by exclusive vaginal surgery inappropriate for fit patients. Further analysis will assess the Quality of Care and hopefully permit to improve surgical and oncologic outcomes by the feedback provided to the different centers.

Disclosure Nothing to disclose.

P71 DOES MISMATCH REPAIR (MMR) DEFICIENCY HAVE PROGNOSTIC SIGNIFICANCE IN LOW-RISK ENDOMETRIOID ENDOMETRIAL CANCERS?

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Introduction/Background Mismatch repair deficiency (MMRd) is observed in 25–30% of all endometrial cancers. This can be detected by the absence of MMR protein staining on immunohistochemistry (IHC). Only 10% of women with MMRd have Lynch syndrome, but MMRd may still have prognostic significance. The objective of this study was to compare clinical outcomes between MMR deficient and proficient low-risk endometrioid endometrial cancers (stage IA, grade 1/2).

Methodology This was a retrospective population-based cohort study of all low-risk endometrial cancers from Vancouver Coastal Health authority region from 2011 to 2016 that were assessed for MMR deficiency. Primary outcome measures were recurrence rates expressed per person-years (py), progression free survival (PFS) and overall survival (OS) calculated using Kaplan-Meier method and log-rank tests. Cox proportional hazards model estimated the association between MMRd and recurrence/death after adjustment for covariates.

Results There were 477 low-risk patients, including 132 MMRd (27.7%) and 345 MMRp (proficient) patients. Women with MMRd tumors had higher recurrence rates (3.53p100py vs 1.21p100py) and worse PFS (p=0.0086) compared to women with MMRp tumors. After adjustment for age, LVSI status, adjuvant therapy, and post-operative grade, MMRd status remained associated with a higher risk of recurrence (HR 2.99, 95% CI 1.27–7.04). There was no significant difference in OS between MMR groups (HR 1.38, 95% CI 0.57–3.33).

Conclusion In low-risk stage IA grade 1 or 2 endometrioid endometrial cancers, MMR deficiency is associated with a higher recurrence rate than in MMR proficient cases, after adjustment for covariates, implying that MMR deficiency reflects a different biology in endometrial cancer.

Disclosure Nothing to disclose.

P72 CHOICE OF TREATMENT FOR ENDOMETRIOID EC $T_{1A}N_0M_0$ $G_1 - G_2$ AND OBESITY III-IV

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Introduction/Background According to Bulletin of National Cancer Registry of Ukraine vol. 20, 2017–2018 endometrial cancer (EC) is the third most commonly occurring cancer in women in Ukraine, it constituted 9.4% (age-standardised rate is 21.4 per 100,000), but 5-year survival rate is lower than in high-income countries. This study aimed to find the best approach for treatment of endometrioid EC in women with obesity III-IV degree to balance appropriate extent of surgery and risk of intra- and postoperative complications.

Methodology The study involved patients with endometrioid EC T1aN0M0 G1 - G2 and obesity III-IV: 107 of them underwent total abdominal hysterectomy + bilateral salpingo-oophoreectomy (TAH+BSO), other 23 patients were treated by laparoscopically assisted vaginal hysterectomy (LAVH). The criteria for accrual had included CT, MRI and then intraoperative evidence allowing to omit lymphadenectomy (selective lymphadenectomy paradigm).
Results Women of both subsets matched by age (respectively 60.9 and 62.4 years). TAH+BSO time constituted 154 min, blood loss was 320 ml, intraoperative complications occurred in 8 cases (7.5%), postoperative - 2 (8.7%), duration of stay in hospital reached 16.9 days. LAVH time was slightly shorter (135 min), blood loss was significantly reduced (240 ml) as well as the rate of intra- and postoperative complications: respectively 2 (8.7%) and 2 (8.7%), time of hospital stay was 2.7 days. Both groups matched by tumour grading: TAH +BSO - G1 in 80 pts (74.8%), G2 - 27 (25.2%); LAVT - 17 (73.9%) and 6 (26.1%) respectively. Throughout 4.5 years of follow-up there were 5 recurrences (4.67%) in TAH+BSO group and 1 recurrence in LAVT group (4.35%).
Conclusion LAVH as a treatment for endometrioid EC T1aN0M0 G1 - G2 and obesity III-IV with preoperative and intraoperative evidence against lymphadenectomy is safe and gains benefits, namely: reduction of procedure's time, blood loss, intra- and postoperative complications' rate and duration of hospital stay.
Disclosure Nothing to disclose.

P73 IS INTRAOPERATIVE FROZEN SECTION NEEDED TO ASSESS MYOMETRIAL INFILTRATION IN ENDOMETRIAL CANCER (EC)? A MULTICENTRE STUDY IN ONCOLOGICAL NETWORK OF PIEMONTE AND VALLE D'AOSTA

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Introduction/Background In developed countries, endometrial cancer is the fourth most common cancer in women. ESGO guidelines propose appropriate strategies based on risk factors. Lymphadenectomy is a staging procedure and even if it does not seem to have a therapeutic role, it is crucial for tailoring adjuvant therapy. The aim of the study is to verify the reliability of expert transvaginal sonographer (TVS) and frozen section (FS) to assess myometrial infiltration (<50% vs ≥50%) to limit systematic lymphadenectomy where not indicated.
Methodology To verify the accuracy of expert TVS and intraoperative frozen section to evaluate myometrial infiltration, 364 consecutive patients affected by EC were prospectively followed in 3 centres of the Oncological Network of Piemonte and Valle d'Aosta from 01/2016 to 10/2018. Definitive pathological report sensitivity, specificity, PPV, NPV, LR + LR- of TVUS and FS are obtained. The results were evaluated overall and by centre.
Results TVUS by expert ultra-sonographer has obtained a diagnostic accuracy with sensitivity 76% specificity 73% PPV 66% NPP 82%. The variability observed between hospitals: centre A sensitivity 76% specificity 86% PPV 85% NPP 82%; centre B sensitivity 60% specificity 75% PPV 59% NPP 76%; centre C sensitivity 95% specificity 58% PPV 58% NPP 95%. The overall FS examination has the following values: sensitivity 86% specificity 97% PPV 95% NPP 92%. Stratifying by centres: A sensitivity 91% specificity 96% PPV 95% NPP 93%; B sensitivity 87% specificity 97% PPV 93% NPP 95%; C sensitivity 85% specificity 100% PPV 100% NPP 91%. Patients who add FS to TVUS had a reclassification improvement of 7.5%.
Conclusion FS remains the most reliable method in the 'real world' to assess myometrial infiltration and to direct the staging procedures in endometrial cancer. The variability of FS among centres belonging to an oncological network is lower than what observed for TVUS.
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P74 ENDOMETRIAL CANCER: CAN THE IKNIFE DIAGNOSE ENDOMETRIAL CANCER?

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Introduction/Background Endometrial cancer is the most common gynaecological cancer in the western world with 88'000 new cases diagnosed per year in the European Union. Diagnosis of endometrial cancer is confirmed by histological examination of endometrial curetting's or outpatient endometrial biopsies e.g. pipelle; but can take up to two weeks. To-date there is no Point-Of-Care (POC) diagnosis available. The intelligent surgical knife ('iKnife') analyses tissue real-time but has never been used to diagnose endometrial cancer.

This study aims to establish whether the iKnife could distinguish between normal and malignant endometrial pipelle biopsy samples based on differences in their lipidomic profiles.
Methodology Research pipelle biopsy samples were obtained for women needing biopsies for clinical reasons (samples concurrently sent to conventional histopathology).

A Waters G2-XS Xevo Q-Tof mass spectrometer (MS) was used in this study in conjunction with a modified handheld diathermy (collectively coined the 'iKnife').

The resultant surgical aerosol containing ionic species produced during diathermy was then analysed with this technology; producing spectra that are background subtracted, lock mass corrected and in the phospholipid range. Principal component analysis (PCA) and linear discriminant analysis (LDA) were then performed to find the variance in spectral signatures. A leave one patient out cross validation was used to obtain diagnostic accuracy.
Results 134 pipelle biopsy samples (73 normal and 61 malignant) were obtained. Each tissue sample was processed as described; producing an individual spectrum per burn.

The iKnife differentiated between normal and malignant endometrial tissues on the basis of differences in their unique phospholipid spectral signatures. Cross validation revealed a diagnostic accuracy of 80%.
Conclusion This pilot study is the first to use the iKnife as a tool to differentiate between normal and malignant endometrial pipelle samples. These results are encouraging and suggest