**VAGINAL MICROBIOME IN PATIENTS WITH ENDOMETRIAL CANCER**

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Abstracts

**Introduction/Background**
Mechanisms by which microbiota exert their influences on human health are not well-defined, but under certain circumstances certain bacterial communities can become altered, thereby disrupting normal homeostasis and resulting in human disease. While disruption of the vaginal microbiome may potentially promote gynecologic carcinogenesis (i.e. cervical cancer), the exact role of the microbiome in endometrial cancer still remains unclear. The aim of the present study was to identify selected species of microorganisms in women with endometrial cancer, and endometrial precancerous lesions.

**Methodology**
48 women with endometrial cancer, endometrial atypical hyperplasia and benign gynaecological conditions were included in this study. In each case, two swabs were taken: vaginal and endocervical. Each patient signed an informed consent form. Real-Time PCR was used to identify bacterial species. Differences between vaginal and endocervical microbiota were examined.

**Results**
Samples from the vagina in terms of isolated microbial species were more diverse than samples from endocervical canal. Mobiluncus curtisi and Fusobacterium nucleatum were the most frequent species detected in vaginal sample, whereas Gardnerella vaginalis and Atoptobium vaginae were the most frequently detected in endocervical canal samples. Patients with endometrial cancer have more abundant vaginal microbiota in comparison to endocervical canal, while women from control group have a comparable number of isolated microorganisms in vaginal and endocervical canal swabs. It was observed that the number of Lactobacillus spp. and Bifidobacterium spp. was statistically decreased in cancer patients compared to controls. It was also shown that significantly more microorganisms were isolated from endocervical canal swabs in women from control group compared to endometrial cancer.

**Conclusion**
Microbiome of patients with endometrial cancer shows clear quantitative and qualitative differences when compared to control groups. The results of our study raise the possibility of a microbiome role in the manifestation and/or etiology of endometrial cancer that should be further investigated.

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**ACCURACY OF MRI IMAGING IN PREOPERATIVE STAGE ASSESSMENT OF ENDOMETRIAL CANCER IN DETERMINING EXTENSION OF SURGICAL PROCEDURE**

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Abstracts

**Introduction/Background**
The preoperative stage assessment of endometrial cancer, determined by the FIGO staging system, is based on imaging and determines the extent of the surgical procedure. Uncertain situations or technical difficulties require MRI as a reference technique. In published papers the accuracy of this technique is done upon a high quality examination (expert radiologist in a reference center), whereas everyday practice shows otherwise. The aim of this retrospective cohort study is to evaluate the concordance between preoperative MRI data and final histopathological examination.

**Methodology**
A retrospective observational study of 106 patients operated for endometrial cancer was performed between July 2021 and February 2022. All patients included were women who had the primary radical surgery for all histological types. The exclusion criteria were lack of preoperative pelvic and abdominal MRI assessment. The final histopathological data from surgical operations were compared with preoperative imaging data.

**Results**
For deep myometrial infiltration the accuracy of MRI was 66.7%, sensitivity was 75%, specificity was 45.5%. For the cervical stroma infiltration the accuracy was 84.1%, sensitivity was 47.6%, specificity was 81.4%. For the parametrium
infiltration the accuracy was 84.1%, sensitivity was 28.6%, specificity was 91.8%. Nodal metastases were detected in 15.9% patients (11.6% in PLN and 4.3% PLN&PALN). The accuracy of the MRI for the detection of nodal metastasis was 75.4%, sensitivity 30.8%, specificity 84.2%. Further analysis evaluated the impact of the following features on the MRI efficiency: histological type, patient age, presence of myomas and the reference status of the radiology center.

Conclusion Unsatisfactory results of MRI imaging, particularly that overestimate the local infiltration, lead to performing too extensive lymphadenectomy, especially that the ability of detecting LN metastasis by MRI has low rate. All quality bias should be taken into consideration when analyzing the results of the MRI to tailor the surgical treatment.

**2022-RA-1643-ESGO**

**PARA-AORTIC LYMPHADENECTOMY INCREASES VASCULAR LESIONS COMPARED TO PELVIC LYMPHADENECTOMY IN ENDOMETRIAL CANCER, A STUDY IN A MEXICAN POPULATION**

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10.1136/ijgc-2022-ESGO.356

**Introduction/Background** Endometrial cancer in Mexico represents the second place, followed by cervical cancer. High-risk staging and treatment involves total hysterectomy, bilateral salpingo-oophorectomy with pelvic and/or para-aortic lymphadenectomy. Surgical staging is necessary in high and intermediate risk cases to assess the extent of the disease and the need for adjuvant therapy, which is why it is important to know the lymph node status to assess the prognosis. Our objective is to evaluate whether para-aortic lymphadenectomy increases vascular lesions compared to pelvic lymphadenectomy in endometrial cancer in a cancer reference center in Mexico.

**Methodology** A retrospective analysis of 44 cases of endometrial cancer that had complete surgical staging was performed. Comparisons were analyzed using Student’s t-test and Mann-Whitney tests. For the statistical analysis, SPSS version 23 was used.

**Results** The surgeries were performed by experienced gynecologists or surgical oncologists. The median age was 53 years, in the analysis we could not identify statistical differences between the rest of the complications, the main complication was lymphocele with p: 0.03, between the pelvic lymph node dissection (PLND) group, compared with the group of PLND and para-aortic lymph node dissection (PALND), vascular injuries were not significant, as well as ureteral injury, reintervention, infection.

**Conclusion** PLND and PALND do not increase vascular lesions, however if the number of lymphocele increases, our pelvic and para-aortic lymph node dissections are performed by experienced gynecologists or surgical oncologists with more than three years of surgical training in a national reference center, which could be an important factor, however, in this study we can conclude that vascular injuries do not increase when we perform para-aortic dissection.