VAGINAL MICROBIOME IN PATIENTS WITH ENDOMETRIAL CANCER

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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 pre-cancerous 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.

Accuracy of MRI Imaging in Preoperative Stage Assessment of Endometrial Cancer in Determining Extension of Surgical Procedure

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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