day. The rate performed by minimal access surgery(MAS) increased from 33% to 93% despite an increasingly obese population.

Conclusion In 2019, 93% of women treated in Guildford for endometrial cancer, received MAS. Since 2008 our conversion rate to open has fallen from 18% to 1.7%, median EBL from 300 ml to 50 ml and our median LOS from 6 days to 1 night. In our experience, Robotic surgery is extremely well tolerated, safe and predictable. Increasingly, we are performing palliative procedures for women with advanced endometrial cancer with minimal negative impact. Robotic surgery is particularly well suited to high BMI patients; allowing surgical staging to be performed without undue difficulty or surgical compromise. This study demonstrates the lowest 30-day mortality (0.14%) within our robotic cohort. Introduction of the Da Vinci robot in our Centre has led to a revolutionary change in practice with significant patient benefit. Many cases previously thought not fit for surgery at all, are now recommended robotic surgery.

Disclosures Anil Tailor: Proctor for Intuitive Surgical

Jayanta Chatterjee: paid-lectures on behalf of pharmaceutical companies

Agnieszka Michael: Educational-grants: Clovis, GSK, Ipsen, Novartis, Pfizer, and Tesaro

Simon Butler-Manuel: Proctor for Intuitive Surgical, Plasma Surgical & Ethicon

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BRCA1/2 MUTATIONS PREDICT BETTER SURVIVAL IN HIGH-GRADE ENDOMETRIOID ENDOMETRIAL CANCER

Yibo Dai, Jingyuan Wang, Luyang Zhao, Zhiqi Wang, Jianliu Wang. *Peking University People's Hospital*

10.1136/ijgc-2020-ESGO.60

Introduction/Background Recent studies and clinical trials demonstrated the vital significance of BRCA mutational status in ovarian cancer treatment, but related evidence in endometrial cancer (EC) is still limited. This study aims to investigate the role of BRCA mutations in predicting EC patients' survival.

Methodology 510 eligible cases from the Cancer Genome Atlas database were retrospectively analysed. Clinicopathological characteristics of patients with different BRCA1/2 mutational status were compared. To analyse the survival influence of BRCA1/2 mutation, Kaplan-Meier survival analyses and Cox regressions were conducted. In order to control confounding bias between groups, propensity score matching method was used.

Results Among the eligible patients, 11 (2.2%) harboured BRCA1 mutations, 43 (8.4%) harboured BRCA2 mutations, and 36 (7.1%) harboured both. Body mass index, rates of hypertension history, proportion of non-endometrioid histology and rates of positive peritoneal cytology were lower in BRCA1/2 mutant patients compared with the wild-type counterpart ($p = 0.020, 0.048, 0.001$ and 0.012 , respectively). Patients with BRCA1/2 mutations showed longer overall (OS) and recurrence-free survival (RFS) (in Kaplan-Meier analyses, $p < 0.001$ and $p = 0.004$, respectively; in Cox regressions, $p = 0.001$ and 0.007 , respectively). Further analyses indicated that the survival influence of BRCA1/2 mutations was only significant in high-grade endometrioid EC patients. Based on the cohorts generated after propensity score matching, in

high-grade endometrioid EC patients, the influence of BRCA1/2 mutations remained significant on OS, but not on RFS ($p = 0.003$ and 0.057 in Kaplan-Meier analyses, $p = 0.020$ and 0.071 in Cox regressions).

Conclusion BRCA1/2 mutations could predict better survival outcome in high-grade endometrioid EC patients, indicating the value of BRCA testing in EC clinical management.

Disclosures This work was supported by the National Natural Science Foundation of China (81972426 and 81874108), Special Projects for Strengthening Basic Research of Peking University (BMU2018JC005), National Key Technology R&D Program of China (2019YFC1005200 and 2019YFC1005201).

The authors have no potential conflict of interest to disclose.

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WHICH DIETARY AND EVERYDAY LIFE HABITS AFFECT ENDOMETRIAL CANCER RECURRENCE? THE MACHINE GIVES THE ANSWER

¹Ofra Castro Wersäll, ¹Zoia Razumova, ²Igor Govorov, ³Miriam Mints. ¹Karolinska Institutet; Women's and Children's Health; ²Karolinska Institutet; Almazov National Medical Research Centre; Women's and Children's Health; ³Karolinska Institutet; Örebro University; Women's and Children's Health

10.1136/ijgc-2020-ESGO.61

Introduction/Background The increased life expectancy and westernization of the lifestyle are considered the major contributors to a sustainable rise in endometrial cancer (EC) rates. The factors predicting EC recurrence include patient age and tumour characteristics, such as type, differentiation, and depth of invasion. At the same time, recent studies testify the impact of meal and exercises on the course of various diseases. What are the food preferences and activities that could influence the ultimate risk of EC relapse and death?

Methodology The study included 481 women who previously underwent a hysterectomy due to EC at Karolinska University Hospital. The participants filled an extensive questionnaire on their dietary habits and everyday routines. Related clinical data was obtained through the National e-health system. It resulted in a large dataset with more than 180 variables, which was processed using the Random Survival Forest (RSF) approach. The latter is applied to a right-censored data and uses a collection of decision trees to rank the variables by their importance for the occurrence of an event. The top-ranked variables were further investigated with the Cox proportional hazards model. Analyses were performed using the RandomForestSRC package for Python.

Results The consumption of the fried potatoes significantly increased the risk of EC relapse and death [HR=8.62 (2.22–33.56), $p=0.002$; HR=6.00 (1.06–34.01), $p=0.043$, respectively), the latter persisted after adjustment for body mass index, age and smoking status. Besides, each additional serving of sweetened soda drinks increased the risk of death [3.262 (1.834–5.800), $p=0.0001$]. In contrast, physical activity was beneficial with each additional Metabolic Equivalent per day decreasing the risk of death by 7.3% [HR=0.927 (0.892–0.964), $p<0.0001$].

Conclusion We hypothesise that the fried potatoes' detrimental effect may be related to the acrylamide, which is formed in starch-rich foods under high-temperature conditions. It acts as