2022. The statistical analysis was carried out using SPSS 22.0.

Results During the indicated period, we followed 459 patients with confirmed genetic mutations that predispose to developing gynaecological cancer. Of the total, 2.2% (10/459) were carriers of PALB2 mutation. Within this cohort of patients, 6/10 (60%) had a family history of BC. 2/10 were diagnosed with a BC at 54 and 36 years old. And other 2/10 with OC at 61 and 49 years old. The histology of BC was invasive ductal carcinoma in both cases. And the histology of OC was high grade serous carcinoma. Surgery treatment was: unilateral mastectomy with homolateral axillary lymphadenectomy, maximal effort cytoreduction in one OC case and interval surgery after neoadjuvant chemotherapy in the other. Adjuvant treatment was needed in all of them: chemotherapy (CT) and radiation therapy (RT) in one BC case, hormone therapy and RT in the other BC case, and CT in both OC cases. Three patients (3/10) underwent prophylactic breast surgery (bilateral nipple sparing mastectomy with immediate reconstruction).

Conclusion Patients carrying PALB2 mutations have a high risk of developing BC and should be followed in specialized hereditary cancer units, in tertiary hospitals.

2022-RA-1566-ESGO CYTOLOGY AND HPV TESTING IN CERVICAL CANCER SCREENING: FACTORS DETERMINING PERSISTENCE AND CLEARANCE

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Introduction/Background In our study, the factors determining persistence and clearance were questioned by cytology and HPV testing in cervical cancer screening. We tried to determine the relationship between persistence and variables such as gravidity, parity, early sexual intercourse, multiple sexual partners, history of oral contraceptive use, history of condom use, history of smoking and alcohol use. Thus, by determining the factors affecting the persistence of HPV, it was tried to determine the patient groups that should be carefully screened and treated.

Methodology The study includes female patients who applied to our clinic and were screened by cytology and HPV test. Cytology and HPV screening were performed again in these patients. The patients were examined in two groups as persistent and non-persistent. Age, age at first intercourse, age at marriage, gravidity, parity, education status, age at first intercourse, multiple sexual partners, history of smoking and alcohol use, history of sexually transmitted diseases, history of oral contraceptive and condom use, HPV vaccine history and history of multivitamin use were questioned with a survey.

Results There was no significant difference between the persistent and non-persistent groups in terms of age, age at first intercourse, age at marriage, gravidity, educational status, oral contraceptive use, smoking and alcohol use, HPV vaccine and multivitamin use. However, there was a significant difference in terms of persistence in patients with multiple sexual partners (p=0.056). In our study, persistence was found to be significantly higher in women who gave birth 2 or more times (p=0.031). In addition, persistence was found to be statistically significantly less in patients who regularly use condoms (p=0.037).

Conclusion It is important to determine the ways of protection from cervical cancer and its precursor lesions by increasing the patients commitment to screening and follow-up, and reducing the factors that may cause persistence with lifestyle changes.

2022-RA-1605-ESGO PRECISION-PREDICTING RISK OF ENDOMETRIAL CANCER IN ASYMPTOMATIC WOMEN

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Introduction/Background Global endometrial cancer (EC) cases continue to increase, placing a significant health and financial burden on individuals and healthcare services. Effective primary disease prevention strategies are urgently required but remain under-researched. Identifying high-risk women for intervention would ensure therapies are targeted at those most likely to benefit. This study aimed to develop a well calibrated EC risk prediction model based on routinely collected data and to validate it in an independent cohort.

Methodology Data from the UK Biobank, comprising 222,031 females ages 45–60 years and 902 incident EC cases, were used to build a flexible parametric survival model using EC risk factors identified through a systematic review of the literature. Model fit was improved with variable transformation and stepwise backward selection. Missing data were dealt with using multiple imputation and bootstrapping (100-fold) was applied for internal validation. Model calibration was assessed using flexible calibration plots and discrimination through calculation of the C-statistic. The model is being externally validated in the Clinical Practice Research Datalink, using data from 3,094,371 women, of whom 20,882 have developed EC.

Results Age, body mass index, waist circumference, age at menarche, age at last birth, late menopause (≥55 years), current hormone replacement therapy or tamoxifen use, prolonged oral contraceptive pill use (≥5 years), type 2 diabetes, smoking and family history of bowel cancer were incorporated into the model. Based on these variables, the model had an adjusted C-static of 0.75 and was well calibrated, with a calibration slope of 0.97 after internal validation.

Conclusion Our model, using easily measurable anthropometric, lifestyle and reproductive variables alongside personal and family medical history, accurately identifies women at high-risk of EC. External validation will determine whether it can be
used to determine eligibility for primary EC prevention trials and reduce the size and costs associated with such studies.

**THE IMPACT ON BODY IMAGE AND QUALITY OF SEXUAL LIFE OF TRANSVAGINAL NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (vNOTES) IN WOMEN WITH HIGH GENETIC RISK OF FEMALE CANCERS**

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10.1136/ijgc-2022-ESGO.834

**Introduction/Background** Women carrying a mutation in BRCA 1 or BRCA 2 genes face complex decisions regarding strategies for managing their increased breast and gynecologic cancer risk. Prophylactic mastectomy in high genetic risk of female cancers could severely affect body esteem decreasing sexual satisfaction. Risk-reducing bilateral salpingo-oophorectomy (RRBSEO) through minimally invasive technique has been shown to reduce the risk of ovarian cancer. Recent evidence has suggested that women with BRCA 1 gene mutations may have an increased risk of uterine serous carcinomas. A new minimally invasive technique, Transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES), allows access to the peritoneal cavity through the vagina without skin incisions.

**Methodology** From June 2021 to February 2022, women carrying a mutation in the BRCA 1 gene, with a history of previous bilateral mastectomy and underwent hysterectomy and RRBSEO using vNOTES technique were studied prospectively. We administered validated tools as Female Sexual Function Inventory (FSFI) and Body Image Scale (BIS) to evaluate the impact on cosmetic, psychological and sexual domains.

**Results** 10 women carrying BRCA 1 gene mutation and undergoing vNOTES technique for hysterectomy and RRBSEO were enrolled. The mean age was 47 years (range 34–50). 4 (40%) patients had a history of breast cancer and they underwent contralateral prophylactic mastectomy. The mean pain assessment after gynecologic surgery was 2.1 (range 0–5). The complete exploration of the abdomen with peritoneal biopsies were performed in all (100%) cases. 6 (60%) women were high concern with body image. Sexual function decreased progressively with age, but FSFI scores in lubrication, orgasm and pain did not have a statistically significantly change after vNOTES surgery.

**Conclusion** Risk-reducing surgery may result in changes to patients' appearance. If prophylactic breast surgery severely affects women body esteem, vNOTES for gynecologic prophylactic surgery has the potential to improve surgical experience, providing long-term functional and cosmetics outcomes.