

Conclusions Two-thirds of patients with non-*BRCA* genes associated with increased risk of ovarian cancer were referred to gynecologic oncologists, with a 48% of uptake or RRS.

IGCS19-0639

231 RISK FACTORS FOR LYMPH NODES INVOLVEMENT IN OBESE WOMEN WITH ENDOMETRIAL CARCINOMAS

¹M Wissing, ²C Mitric, ²S Salvador, ²S Lau, ²V López-Ozuna*, ²A Yasmeeen, ²W Gotlieb, ²L Kogan. ¹McGill University, Division of Cancer Epidemiology- Department of Oncology, Montreal, Canada; ²Jewish General Hospital- McGill University- Montreal- Quebec- Canada., Division of Gynecologic Oncology-, Montreal, Canada

10.1136/ijgc-2019-IGCS.231

Objectives To assess risk factors for lymph node involvement in patients with endometrial cancer and a body-mass index (BMI) ≥ 30 kg/m².

Methods A retrospective analysis was performed of obese patients diagnosed with endometrial carcinoma between 2007 and 2015, treated in a single center in Montreal. Preoperative variables evaluated were age, BMI, parity, and preoperative ASA score, grade, CA-125 and histology. Odds ratios (OR) and hazard ratios (HR) and their respective 95% confidence intervals (95%CI) were calculated using multivariable logistic regression and Cox proportional hazard models.

Results The study included 230 women with BMI >30 , 223 (97.0%) had complete staging. Pelvic lymph node involvement was detected in 26 patients (11.3%). Sentinel node detection and pelvic lymph node dissection decreased with increasing BMI (adjusted OR 0.86, 95% CI 0.76–0.97 and 0.76, 95%CI 0.59–0.96, respectively, per 1 kg/m² increment). Pelvic lymph node involvement was inversely correlated with BMI (adjusted OR 0.88, 95% CI 0.79–0.99) and present in 16/85 (18.8%), 6/56 (10.7%), and 4/82 (4.9%) of patients with a BMI of 30.0–34.9, 35.0–39.9, and ≥ 40.0 kg/m², respectively. Preoperative CA-125 was associated with lymph node involvement (adjusted OR 2.77, 95%CI 1.62–4.73, per quartile increment). During a median follow-up of 72 months, a higher BMI was not associated with worse recurrence-free survival (adjusted HR 1.04, 95%CI 0.98–1.10), disease-specific survival (adjusted HR 0.97, 95%CI 0.88–1.06), or overall survival (adjusted HR 0.92, 95% CI 0.84–0.99).

Conclusions Pelvic lymph node dissection might be omitted in selected cases of morbidly obese patients with failed sentinel nodes mapping and a low CA-125.

IGCS19-0642

232 SURGICAL WAIT TIME MIGHT IMPACT SURVIVAL IN SELECTED PATIENTS WITH ENDOMETRIAL CARCINOMA

¹M Wissing, ²C Mitric, ²V López-Ozuna*, ²S Salvador, ²S Lau, ²W Gotlieb, ²L Kogan. ¹McGill university, Division of Cancer Epidemiology- Department of Oncology, Montreal, Canada; ²Jewish General Hospital- McGill University- Montreal- Quebec- Canada., Division of Gynecologic Oncology-, Montreal, Canada

10.1136/ijgc-2019-IGCS.232

Objectives To determine whether surgical wait time impacts survival in patients with endometrial cancer (EC).

Methods A retrospective analysis was performed, including all patients diagnosed with EC between 2008 and 2015 treated in a single centre in Montreal. Associations between surgery wait times and other variables were calculated using univariable linear regression models. In survival analysis, Cox proportional hazard models were used to calculate hazard ratios (HR); covariates included age, BMI, year of diagnosis, ECOG score, and tumor histology, grade and stage at surgery.

Results The study included 358 patients with median follow-up of 5.9 years, categorized into four groups based on their wait time: 89, 87, 91, and 91 women with a median wait time of 37 days (8–49), 62 days (50–70), 91 days (71–103), and 91 days (104–869), respectively. Increased surgical wait time was associated with lymph-vascular space invasion and distant metastases. A surgery delay of 71 days or more (median) did not result in significantly worse overall ($p=0.54$) or EC specific survival ($p=0.27$), while known prognostic variables such as stage and grade at surgery did ($p<0.05$). In a subgroup analyses, patients with grade II tumors who had more than 71 days between biopsy and surgery ($n=51$) had significantly ($P=0.037$) more EC-related mortality (5-year cancer-specific survival 83.9%, versus 100% for those with surgery within 70 days). Similarly, surgery delay had impact on overall survival also in patients with BMI >30 (HR 1.43, 95% CI 1.00–2.03).

Conclusions While surgery delay might predict outcome in specific subgroups, biological tumor determinants seems more important for survival outcome.

IGCS19-0304

233 CLINICAL NEXT-GENERATION SEQUENCING PIPELINE FOR BRCA MUTATIONS PROVIDES TRACEBACK TO THE FAMILIES OF DECEASED OVARIAN CANCER PATIENTS

¹J Mcgee*, ²H Lin, ³M McLachlan, ³C Howlett, ³P Ainsworth, ⁴K Panabaker, ²J Kerkhof, ²B Sadikovic. ¹Western University, Obstetrics and Gynecology, London, Canada; ²Western University, Pathology and Laboratory Medicine, London, Canada; ³Western, Pathology and Laboratory Medicine, London, Canada; ⁴Western, Medical Genetics Program of Southwestern Ontario, London, Canada

10.1136/ijgc-2019-IGCS.233

Objectives Advances in Next Generation Sequencing (NGS) allow for multiple gene analysis in an efficient, cost-effective manner. Deceased ovarian cancer patients untested for germline *BRCA* mutations represent a missed opportunity for clinicians to prevent future cancers in their surviving relatives. Families of this lost cohort can benefit through Traceback initiatives. We sought to validate our London Health Sciences custom Hereditary Cancer Panel using formalin fixed paraffin embedded (FFPE) tumor samples to assess *BRCA* 1/2 status in a cohort of high grade serous ovarian cancer (HGSC) patients.

Methods FFPE samples from 150 deceased HGSC patients were assessed using an Illumina MiSeq sequencer with a mean coverage of 1000x and average minimum coverage of 700x when 24 samples were tested per run. Validation of a subset of identified variants was then undertaken using Sanger and Multiplex Ligation-dependent Probe Amplification (MLPA).