2022-RA-812-ESGO SERUM MARKERS AND CYTOKINES IN PATIENTS WITH OVARIAN CANCER. BORDERLINE OR BENIGN OVARIAN TUMORS

¹Marek Nowak, ¹Lukasz Janas, ²Michał Kiełbik, ¹Aleksandra Trzepadłek, ¹Wojciech Bartosik, ³Ewa Głowacka, ²Izabela Szulc-Kiełbik, ²Magdalena Klink. ¹Department of Operative Gynecology and Gynecologic Oncology, Polish Mother's Memorial Hospital – Research Institute, Lodz, Poland; ²Institute of Medical Biology, Polish Academy of Sciences, Lodz, Poland; ³Laboratory Diagnostics Centre, Polish Mother's Memorial Hospital – Research Institute, Lodz, Poland

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Introduction/Background The gold standard of serum tumour markers to detect ovarian cancer is CA125, HE-4 and algorithm ROMA. However there is still need to improve its accuracy. Cytokines play a crucial role in tumour growth and progression according to proangiogenic and immunosuppressive acting. The aim of this study was to investigate the potential use of serum levels of selected cytokines in preoperative diagnosing of adnexal mass.

Methodology The study group consisted of 128 patients: 35 with epithelial ovarian cancer (EOC), 8 with borderline tumors and 85 with benign cysts (24 teratomas, 27 endometriotic and 34 other epithelial). We measured in sera obtained preoperatively the level of CA125, HE-4 and the panel of 6 cytokines: IL 1β, 6, 8, 10, 12, TNF using cytometric bead array (CBA) and one chemokine CXCL1/GRO-α by ELISA.

Results Serum levels of IL-6, IL-8, IL-10 and CXCL1/GRO-a were the highest in patients with ovarian cancer (2045 pg/ ml; 208; 32; 356 pg/ml, respectively), mid-range in borderline group (29 pg/ml; 45, 20; 278 pg/ml) and the lowest in benign ovarian tumours (17 pg/ml; 29; 16; 127 pg/ml, respectively). The similar pattern was present with standard ovarian cancer markers - CA125 (959 vs 206 vs 43 U/ml) and HE-4 (534 vs 117 vs 51 pmol/l). Other investigated cytokines had similar levels in all groups of patients. Analyzing the differences in the subgroups of women with benign ovarian tumours we didn't observe any significant except CA125 and IL-8; they were slightly elevated in cases of endometriotic ovarian cysts.

Conclusion Proinflammatory cytokines (IL-6, IL-8), immunosuppressive (IL-10) and CXCL1/GRO- α were highly elevated in sera of EOC patients what points on their role in cancer development. Moreover, they might be useful in preoperative assessment of the risk of malignancy as they were higher than in patients with benign and also borderline ovarian tumors.

2022-RA-817-ESGO **COMPARISON OF SURGEON'S** INTRAOPERATIVE ASSESSMENT OF **RESIDUAL TUMOR AND POSTOPERATIVE** FINDINGS ON COMPUTED TOMOGRAPHY IN PATIENTS WITH ADVANCED STAGE EPITHELIAL OVARIAN, TUBAL OR PERITONEAL CANCER – A RETROSPECTIVE **COHORT STUDY**

¹Inge Peters, ¹Luigi Congedo, ²Giacomo Avesani, ²Camilla Panico, ¹Claudia Marchetti, ¹Giovanni Scambia, ¹Anna Fagotti. ¹Department of Woman's and Child health and Public Health Sciences, Gynecologic Oncology Unit, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy; ²Department of Radiology, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy

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Introduction/Background Primary debulking surgery (PDS) for advanced epithelial ovarian cancer aims to resect all macroscopically visible lesions. Previous studies showed a discrepancy of 20-48% between the surgeon's intraoperative assessment of residual tumor (RT) and findings on postoperative computed tomography (CT) scans. Patients with radiographical lesions that were suspicious of malignancy had worse prognosis. The current study aimed to compare the postoperative CT findings to the surgeon's intraoperative assessment at our centre and to determine their effect on survival.

Methodology All patients with newly diagnosed FIGO stage III-IV ovarian, tubal, or primary peritoneal cancer who underwent complete or near complete PDS (RT < 2.5 mm) at the Fondazione Policlinico Universitario Agostino Gemelli IRCCS hospital in Rome, Italy, between June 2019 and June 2021 and in whom CT evaluation was performed within 50 days from PDS were included. CT-scans were assessed using a 5point scale, ranging from normal to definitely malignant. Indeterminate results were omitted from further analyses.

Results A total of 145 patients were identified. Clinical data and postoperative CT-scans could be retrieved from 102 patients. Of these patients, CT findings corresponded to the surgeon's intraoperative assessment in 77.5% of cases. In 13 patients (12.7%), CT findings were scored as indeterminate. Lesions that were deemed probably malignant or definitely malignant were found in seven (6.9%) and three patients (2.9%), respectively, with a median lesion size of 24.5 mm (range 8.0-85.0 mm). Most lesions were reported in the left flank. Comparing radiologically concordant and discordant findings, no differences in progression-free survival (17.7 versus 18.9 months, p = 0.463) or overall survival (20.0 versus 22.8 months, p=0.087) were seen.

Conclusion In line with previous data, a discrepancy of 22.5% was found between surgeon's intraoperative assessment and postoperative CT-scan on the presence of RT. Nonetheless, CT findings did not affect survival outcomes.

2022-RA-820-ESGO THE ROLE OF MINIMALLY INVASIVE SECONDARY CYTOREDUCTION IN **RECURRENT OVARIAN CANCER PATIENTS**

Carmine Conte, Claudia Marchetti, Matteo Loverro, Maria Teresa Giudice, Andrea Rosati, Valerio Gallotta, Giovanni Scambia, Anna Fagotti. Gynecologic Oncology Unit, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy

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Introduction/Background Retrospective series have shown minimally invasive secondary cytoreductive surgery (MI-SCS) is a feasible approach in selected cases of recurrent ovarian cancer (ROC). However, no predictors of MI-SCS feasibility are currently available.

This study aims to identify predictive factors of MI-SCS feasibility and to compare perioperative and survival outcomes in a matched series of ROC patients who underwent secondary cytoreduction via an open or minimally invasive surgical approach.

Methodology We retrospectively identified all platinum-sensitive epithelial ROC patients who underwent minimally invasive or laparotomic (LPT) SCS between January 2013 and July 2020. All patients underwent preoperative positron emission tomography computed tomography (PET-CT) scan and diagnostic laparoscopy before SCS. A 1:2 propensity score-