(sensitivity=92.1%, specificity=86.2%, overall accuracy 87.4%). The main cause of non-optimal interventions (n=52) were: diffuse carcinomatosis of the small intestine and its mesentery – 73% (38/52), carcinomatosis of the hepatoduodenal zone – 9% (5/52) and a total of 16% (9/52) were other non-resectable tumors. Radiation diagnostic and intraoperative revision were comparable in 60.5% (115/190). The sensitivity of CT in detecting of the small intestine lesions was 23.7%, the specificity was 90%, while for laparoscopy – the sensitivity was 93.3%, and the specificity was 100%. In assessing of carcinomatosis of the hepatoduodenal zone, the advantage belongs to radiation diagnostic Methods the sensitivity of CT was 66.7%, the specificity was 97%, while the sensitivity of diagnostic laparoscopy was 0%.

Conclusion The threshold value for performing complete or optimal cytoduction is PCI = 9 points. The leading reasons for suboptimal cytoreductive operations were diffuse carcinomatosis of the small intestine wall and the mesentery. Diagnostic laparoscopy reduces the frequency of suboptimal cytoreductive operations from 67% to 13%.

2022-VA-1485-ESGO SURGICAL ANATOMY OF THE RIGHT UPPER QUADRANT AFTER CYTOREDUCTIVE SURGERY

[1]Ganim Khatib, [2]Mesut Mısırlıoğlu. *[1]Gynecologic Oncology, Cukurova University, Adana, Turkey; [2]Cukurova University, Adana, Turkey*

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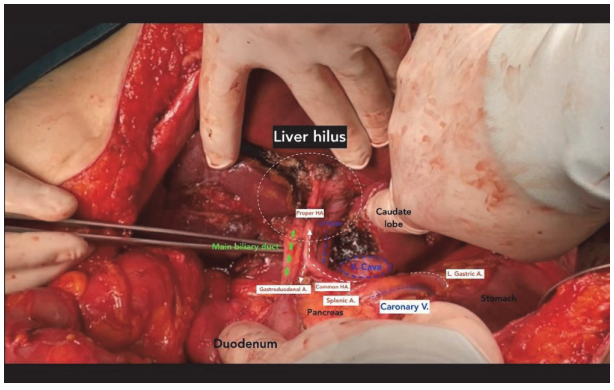
Introduction/Background On the basis of evidence substantial effort is exerted by gynecologic oncologists to achieve no residual macroscopic disease for obtaining best oncologic outcomes in cytoreductive surgery performed for ovarian cancer. In this regard, dealing with upper abdomen metastases and being familiar with related surgical procedures is essential. Right upper quadrant cytoreduction harbors serious potential of complications and morbidities, and therefore one of the most time-consuming and challenging procedures. Good knowledge of surgical anatomy is crucial for performance of these procedures and techniques and avoiding complications and potential morbidities.

Methodology Video presentation.



Abstract 2022-VA-1485-ESGO Figure 1

Results In this video, we demonstrate the surgical anatomy of the right upper quadrant after complete tumoral clearance in a 72 years old woman operated for advanced ovarian cancer with extensive peritoneal carcinomatosis and implants in the right upper quadrant.

Conclusion As gynecologic oncologists, dealing with upper abdomen metastases and being familiar with related surgical procedures is essential. Good knowledge of surgical anatomy is crucial for performing cytoreductive surgical procedures in upper abdomen.

2022-RA-1486-ESGO CHARACTERISTICS, TREATMENT PATTERNS AND OUTCOMES OF PATIENTS WITH NEWLY DIAGNOSED ADVANCED OVARIAN CANCER (AOC) IN ENGLAND

[1]Angela Whittle, [1]Betina Blak, [2,3]Amy Zalin-Miller, [1]Orlaith Condon. *[1]Medical affairs, Oncology Business Unit, AstraZeneca UK Ltd, London, UK; [2]Health Data Insight, Cambridge, UK; [3]National Disease Registration Service at NHS Digital, Cambridge, UK*

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Introduction/Background Personalised care and targeted therapy approaches in aOC have evolved during the last decade with introduction of bevacizumab to platinum-doublet chemotherapy being one of these early advances during this period. This observational, retrospective database study builds on previously published real-world evidence describing patient characteristics and outcomes in newly diagnosed aOC patients treated with systemic therapy with/without bevacizumab.

Methodology Newly diagnosed aOC patients (stage III/IV) were selected from the National Cancer Registration Dataset 01/08/2014 through 31/12/2018. This work includes patient data collated by the National Disease Registration Service. Patients aged ≥18 years at diagnosis, with no other cancers diagnosed in the five years prior to aOC, treated with systemic anti-cancer therapy (SACT) were included. Follow-up ended 31/12/2019. An algorithm defined probable therapy line occurring after aOC diagnosis. Time to next treatment (TTNT): days from start of first-line therapy to start of second-line therapy. Characteristics, treatment patterns and outcomes were described overall and by a sub-cohort receiving bevacizumab in first-line.

Results In the 8717 patients, median age at first-line therapy start was 68.8 (Inter-Quartile-Range (IQR):59.8–75.7) years, 2968 (34%) were diagnosed at stage IV and 1717 (20%) had recorded performance status (PS) 2–3 during first-line. Total, 5505 (63%) received surgery; 2556 (29%) had surgery before first-line therapy. Median TTNT was 331 (IQR:194–488) days in patients observed receiving second-line (n=4193 (48%)). Total 1833 (21%) received bevacizumab in first-line. This sub-cohort had median age 64.8 (IQR:56.4–71.3) years; 921 (50%) were diagnosed at stage IV; 210 (11%) had recorded PS 2–3 during first-line. Median bevacizumab cycles was 11 (IQR:6–16). Surgery occurred in 1291 (70%) patients, with 420 (23%) receiving surgery before first-line. Median TTNT was 426.5 (IQR:309.5–602) days in patients observed receiving second-line (n=972 (53%)).

Conclusion These observations add to the collective body of evidence regarding the changing treatment landscape in aOC.

2022-RA-1492-ESGO HOMOLOGOUS RECOMBINATION DEFICIENCY (HRD): A NEW OVARIAN CANCER BIOMARKER – VALIDATION OF DECENTRALIZED GENOMIC PROFILING, WITH A FOCUS ON GENOMIC LARGE REARRANGEMENTS (LRS)

[1]Carsten Denkert, [1]Marcel Romey, [2]Brad Swedlund, [1]Akira Hattesohl, [1]Julia Teply-Szymanski, [3]Stefan Kommoss, [2]Kristin Kaiser, [4]Annette Staebler, [5]Andreas Du Bois, [1]Albert Grass, [2]Christiane Knappmeyer, [5]Florian Heitz, [2]Cara Solimeno, [5]Philipp Harter, [6]Frederik Marmé, [6]Timo Gaiser, [2]Chris Neff, [7]Uwe Wagner, [2]Kirsten M Timms, [1]Fiona Rodepeter. *[1]Institut für Pathologie, Philipps-Universität Marburg, Marburg, Germany; [2]Myriad Genetics, Salt Lake City, UT; [3]Department für Frauengesundheit, Universitätsklinikum Tübingen, Tübingen, Germany; [4]Institut für Pathologie, Universitätsklinikum Tübingen, Tübingen, Germany; [5]Department für Gynäkologie und gynäkologische Onkologie, Evangelische Kliniken Essen-Mitte, Essen, Germany; [6]Department für konservative Gynäkologische Onkologie, Universitätsklinikum Mannheim, Heidelberg, Germany; [7]Klinik für Frauenheilkunde und Geburtshilfe, Philipps-Universität Marburg, Marburg, Germany*

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Introduction/Background The diagnostic evaluation of HRD is central to define targeted therapy strategies for patients with ovarian carcinoma, so advances in decentralized genomic profiling are mandatory to allow for broader testing. We show the feasibility of implementing HRD assays in academic setting laboratories, and evaluate prevalence of genomic large rearrangements (LRs) in real life cohorts of high-grade ovarian cancer patients.

Methodology We evaluated HRD in 514 ovarian carcinoma samples by a hybrid capture next-generation sequencing assay using the standardized Myriad Mychoice cdx HRD test. Each patient's HRD status was evaluated by measuring the BRCA1/2 mutational status and the Genomic Instability Score (GIS). All samples were measured twice, in the central Myriad laboratory and in an academic molecular pathology laboratory, and the concordance was analyzed. Afterwards, the cohort was extended to 1163 ovarian cancer samples to determine real world prevalence of LRs in HRR genes.

Results Combining GIS and BRCA-mutations, a total of 200 (38.9%) of 514 tumors were HRD-positive. High-grade serous histology ($p<0.000001$), grade 3 tumors ($p=0.001$) and patient age <60 years ($p=0.0003$) were significantly associated with a positive GIS. Concordance between both laboratories for the HRD-status was 97.1% (499/514 tumors) with a sensitivity of 94.6% and a specificity of 98.4%.

LRs were found in 88/1163 (7.5%) of ovarian cancer samples. Interestingly, RAD51B, CDK12, BRCA1, ATM and BRCA2 were found to constitute 74% of all observed LRs.

Conclusion The percentage of HRD-positive tumors found was similar to that observed in the PAOLA-1 trial, with a high concordance between central and local laboratories. These results support introduction of standardized HRD assay in academic molecular pathology laboratories, to allow for broad access to personalized oncology strategies for patients with ovarian cancer. Genomic LRs are observed in a small portion of ovarian cancer samples, with a skewed occurrence towards 5/15 genes.

2022-RA-1493-ESGO RECURRENCE IN OVARIAN CANCER AFTER CYTOREDUCTIVE SURGERY ACCORDING TO THE TYPE OF CHEMOTHERAPY

[1]Maria Pellise Tintore, [1]Francesc Fargas, [1]Rafael Fabregas, [2]Francesc Tresserra, [3]Ignacio Rodriguez. *[1]Hospital Universitario Dexeus, Barcelona, Spain; [2]Pathological Anatomy, Hospital Universitario Dexeus, Barcelona, Spain; [3]Statistics, Hospital Universitario Dexeus, Barcelona, Spain*

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Introduction/Background Ovarian cancer (OC) has a low incidence, but high mortality due to a habitual diagnosis in advanced cancer stages. Regardless of the histological subtype, the main route of spread is the peritoneal cavity. Therefore, intraperitoneal chemotherapy has an important role where the advantages are still unknown.To determine whether patients treated with intraperitoneal chemotherapy have later recurrences and a different pattern of recurrence in patients with advanced ovarian cancer.

Methodology Retrospective cohort and observational study enrolling stage III-IV OC patients who underwent primary surgery and complete cytoreduction, with a minimum of 6 year follow up from 2011 to 2019. We examinate 2 groups: Group A (n=17) receiving intraperitoneal chemotherapy and Group B (n=22) receiving standard chemotherapy.

Results Following the FIGO 2021 histopathologic classification, most of our ovarian cancer cases were of epithelial origin. Serous carcinoma was the most common with 88% (n=15) in group A and 72% (n= 16) in group B. All patients with recurrence had moderately or poorly differentiated histological grading. Regardless of the chemotherapy, after a median follow-up of 54 month the risk of disease progression or death was 50%. In group A the progression-free survival after 12 months was 86% increasing up to 45.7% after 5 years. In group B the progression free survival after 12 months was 90% increasing up to 52.8% after 5 years. No significant progression-free survival increase was observed with either both chemotherapy regimen (log-rank p-value 0.74)

Conclusion Chemotherapy does not seem to have a direct impact on the recurrence time in advanced ovarian cancer patients. However, there is little evidence that needs to be confirmed with more studies.

2022-RA-1495-ESGO DIFFERENTIAL METABOLISM OF ESTROGENS IN MODEL CELL LINES AND TISSUES OF HGSOC SUBTYPES

Renata Pavlic, Marija Gjorgoska, Tea Lanišnik Rižner. *Faculty of Medicine, University of Ljubljana, Institute of Biochemistry and Molecular Genetics, Ljubljana, Slovenia*

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Introduction/Background Ovarian cancer is highly lethal and heterogeneous. Several hormones are involved in its etiology, including estrogens. After menopause, when ovarian cancer usually develops, estrogens are formed primarily in the local tissues from the circulating steroid precursors dehydroepiandrosterone sulfate (DHEA-S) or estrone-sulfate (E1-S). Despite the known tumor-promoting role of estrogens in ovarian cancer, the expression of E1-S or DHEA-S transporters, estrogen biosynthetic or metabolic enzymes, estrogen receptors, and the metabolism of estrogens has not yet been systematically evaluated in this disease.