#822 EXPANDING USE OF HIPEC AT TIME OF INTERVAL DEBULKING SURGERY. A PROSPECTIVE ANALYSIS ON PERIOPERATIVE AND ONCOLOGICAL OUTCOMES

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Introduction/Background In advanced ovarian cancer, randomized data showed that hyperthermic intraperitoneal chemotherapy (HIPEC) after interval debulking surgery (IDS) determined improvement in both progression free survival (PFS) and overall survival (OS). However, data include only patients with FIGO stage III disease receiving ≤ 4 cycles of neoadjuvant chemotherapy (NACT). We aimed to assess perioperative outcomes and PFS of FIGO stage IV and/or patients receiving >4 cycles of NACT.

Methodology We performed a retrospective observational study in patients with high-grade serous ovarian cancer (HGSOC). We evaluated patients with FIGO stage IV undergoing IDS+HIPEC, followed by NACT. We assessed perioperative outcomes and PFS. We excluded patients with poor performance status, positive peritoneal washings, positive peritoneal biopsy, or peritoneal metastases at diagnostic laparoscopy. Patient characteristics, intraoperative data, and postoperative outcomes were collected. PFS was calculated from the date of IDS to the date of disease progression or death. Univariate and multivariate analyses were performed to identify factors associated with OS and PFS. The study was approved by the institutional ethics committee.

Results Among 205 patients, 96 (47%) were FIGO stage IV. The median age was 57 years (range 32-85). The median body mass index was 26 kg/m² (range 17-41). The median number ofcycles of NACT was 3 (range 1-10). The median number of cycles of HIPEC was 2 (range 1-6). The median duration of surgery was 7 hours (range 3-14). The median hospital stay was 7 days (range 1-30). The median PFS was 21 months (range 0.1-67). The median OS was 38 months (range 1-111). The median time from IDS to HIPEC was 1 week (range 1-10). The median time from HIPEC to NACT was 2 weeks (range 1-8). The median number of HIPEC cycles was 2 (range 1-6). The median number of NACT cycles was 3 (range 1-10). The median number of chemotherapy cycles was 9 (range 1-20). The median number of chemotherapy cycles was 9 (range 1-20).

Conclusion In conclusion, the use of HIPEC at time of IDS+HIPEC is feasible and safe. HIPEC may improve outcomes in patients with FIGO stage IV ovarian cancer. Further studies are needed to evaluate the long-term outcomes of HIPEC in this population.

Disclosures None

#823 COMPREHENSIVE CHARACTERIZATION OF NAÏVE TREATMENT SAMPLES OF HIGH GRADE SEROUS OVARIAN CANCER ADDRESSED TO NEOADJUVANT CHEMOTHERAPY: A HYPOTHESIS-GENERATING STUDY ON BIOMARKERS OF RESPONSE TO PLATINUM-BASED CHEMOTHERAPY

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Introduction/Background Neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS) has been shown to be not oncologically inferior to primary debulking surgery for patients affected by advanced epithelial ovarian cancer (EOC). However, 20% of patients don’t respond and therapeutic options are limited. The genomic landscape could, at least partially, explain this phenomenon. By correlating mutational profiles with clinical outcomes, we aimed at identifying genomic features of resistance to platinum-based chemotherapy.

Methodology FPG500 (IRB 3837) is a comprehensive cancer genome profiling programme at Fondazione Policlinico Agostino Gemelli IRCCS. An evaluation of 523 genes (TSO500HT, Illumina) is provided. All EOC patients addressed to NACT and enrolled in FPG500 were included. Response to NACT was scored following the chemotherapy response score (CRS): no/minimal tumor response (CRS1), partial response (CRS2), and total response (CRS3). Age, residual tumour at IDS, and stage were also considered.

Results At data cut-off of the 9th of January 2023, 96 EOC patients were included in this preliminary analysis. 85 patients had at least one genomic alteration (78%). The overall mean of alterations was 1.75 (SD=1.37). CCNE1 amplifications were associated with older age (17% age < 64 years vs
26.5% > 64 years), and worse CRS (24% CRS 1–2 vs 15% CRS 3), similar to PIK3CA (mainly single nucleotide variants [SNVs] or insertion/deletions [Indels]) (37% CRS 1–2 vs 19% CRS 3). MYC amplifications and PIK3CA alterations were associated with a more advanced stage (respectively 37.5% and 39% stage IV vs 27% and 25% stage III). However, MYC was associated to with a better response to NACT (28% CRS 1–2 vs 42% CRS 3).

Conclusion CCNE1, MYC and PI3KCA genomic alterations seem to be associated with stages and response to chemotherapy, however, a sample size of 365 patients is required to obtain statistical significance. The enrollment is ongoing and results are expected in 2025.

Disclosures The authors declare no disclosures.

#832 HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY WITH INTERVAL DEBULキング SURGERY FOR ADVANCED EPITHELIAL OVARIAN CANCER: A REAL-WORLD EXPERIENCE FROM AN INDIAN CENTRE

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Introduction/Background Hyperthermic intraperitoneal chemotherapy (HIPEC) has improved survival in advanced epithelial ovarian cancer (EOC) in randomised controlled trials when administered with interval debulking surgery (IDS). There is limited data on IDS HIPEC in EOC from India. This study aimed to assess the perioperative and survival outcomes of IDS HIPEC in Indian women with EOC.

Methodology In this prospective observational study, women who underwent IDS HIPEC for advanced EOC between March 2018 and December 2022 at Tata Medical Center were included. HIPEC (cisplatin 100 mg/m2) was offered to eligible women as per institutional protocol and multidisciplinary team recommendation. The Clavien-Dindo classification and Common Terminology Criteria for Adverse Events (CTCAE) version 5.0 were used for complications. Appropriate descriptive and survival statistics were used in the analysis.

Results A total of 77 women (median age 54; IQR 46–63) underwent IDS HIPEC during the study period. The majority had stage IIIC (92.2%) and high-grade serous histology (94.8%). All had optimal cytoreduction at IDS (CC0 94.8%, CC1 5.2%) before HIPEC. Bowel resection and diversion rates were 20.8% and 11.7%, respectively. Surgical complications of Clavien-Dindo grade 3 or higher occurred in 19.5% of patients. CTCAE grade 3 or higher anaemia and hypokalaemia developed in 32.5% and 13%, while 39% had postoperative infections. Thirty-day readmission and 30-day death rates were 19.5% and 3.9%, respectively. The median hospital stay was 11 days (IQR 8–13) and the median time to adjuvant chemotherapy was 30 days (IQR 25–35). The median progression-free survival was 26.4 months (95% CI 22.4–30.4), and the median overall survival was 43.7 months (95% CI 37.7–49.8).

Conclusion HIPEC administered at the time of IDS in women with advanced EOC had acceptable safety and encouraging survival outcomes.

Disclosures none

#841 GENETIC ALTERATIONS IN EPITHELIAL OVARIAN CARCINOMA

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Introduction/Background Ovarian carcinoma results from a succession of genetic alterations involving proto-oncogenes and tumor suppressor genes, which have a critical role in normal cell growth regulation. Alterations of the c-erbB-2 and c-Myc proto-oncogenes and p53 and BRCA1 tumor suppressor genes, have been frequently observed in a sporadic ovarian carcinoma. The aim of this study was to investigate the frequency of heterozygosity loss (LOH) in the p53 and BRCA1 genes regions, so as the frequency of the c-Myc and c-erbB-2 oncogenes amplification in the sporadic epithelial ovarian carcinomas, together with the association of these alterations with the stage and prognosis of the disease.

Results LOH in the p53 gene region was detected in 31% of tumor samples of which all were in the FIGO IIIc stage. In the BRCA1 gene region, LOH was detected in 39% of tumor samples. By the FIGO classification 60% of this cancers were in the stage IIIc. LOH in both of the analyzed regions was detected in 7.7% of samples, in the FIGO IIIc stage.

Both the amplification of the c-myc and c-erbB-2 oncogenes were found in 27% of the analyzed samples, ranging from 50% to 250%. It is worth to mention that erb was deleted in four samples (27%). In one of them, amplifications of both myc and erb genes were found at the same time (6.6%). Most of the ovarian carcinomas (60%) with alterations in c-Myc and c-erbB-2 belonged to advanced FIGO stages (IIIc).

Conclusion Both types of gene alterations, LOH in the p53 and BRCA1 genes and amplification of c-Myc and c-erbB-2 oncogenes, are most likely late events in pathogenesis of the sporadic epithelial ovarian cancers that correlate with an...