#847 COMPLICATIONS AFTER PRIMARY AND INTERVAL DEBULKING SURGERY FOR ADVANCED OVARIAN CANCER: A RETROSPECTIVE ANALYSIS IN A TERTIARY REFERRAL CENTER

Ottavio Cassandro, Luigi De Vitis, Gabriella Schiardi, Giuseppe Caruso, Benedetta Zambetti, Simone Bruni, Ilaria Betella, Hana Leonarda Cigp, Maria Teresa Achilli, Annalisa Garbi, Alexis Aloisi, Nicoletta Colomba, Roberto Biffi, Angelo Maggioni, Vanna Zanagnolo, Giovanni Damiano Aletti, Francesco Multinu, Benedetta Zambetti, Simone Bruni, Ilaria Betella, Hana Leonarda Cigp, Maria Teresa Achilli, Annalisa Garbi, Alexis Aloisi, Nicoletta Colomba, Roberto Biffi, Angelo Maggioni, Vanna Zanagnolo, Giovanni Damiano Aletti, Francesco Multinu.

Division of Gynecological Surgery, European Institute of Oncology, Milan, Italy; Faculty of Medicine and Surgery, University of Milano-Bicocca, Milan, Italy; Department of Oncology and Hemato-Oncology, University of Milan, Milan, Italy.

Abstract

Introduction/Background Surgical complications following primary (PDS) or interval debulking surgery (IDS) for advanced ovarian cancer can impact patients’ quality of life and survival. Postoperative complications at our institution were investigated and associations with patient characteristics and surgical outcomes were explored.

Methodology Women with stage III/IV ovarian cancer who underwent PDS or IDS at the European Institute of Oncology, Milan, between 2009 and 2021 were included. Patient characteristics, surgical outcomes, and postoperative complications were retrieved from medical records. Complications were graded based on the Accordion Severity Classification System. Univariate and multivariate regression analysis was performed using Accordion ≥ III as endpoint and pre-/intra-operative factors as predictors.

Results

The study included 1213 patients with a mean age at diagnosis of 58.9 (SD=10.7). Among them, 90.7% (n=1100) were high-grade serous, and 53.9% (n=654) underwent PDS. Accordion complications class ≥ III were registered in 278 (22.9%) patients; seven deaths (0.6%) occurred during the first 30 days. A total of 104 (8.6%) patients required drainage on October 13, 2023 by guest. Protected by copyright.http://ijgc.bmj.com/ Int J Gynecol Cancer: first published as 10.1136/ijgc-2023-ESGO.661 on 27 September 2023. Downloaded from http://ijgc.bmj.com/ on October 13, 2023. Protected by copyright.

Conclusion The risk factors for severe complications identified in our study should be considered in the surgical planning for patients with advanced ovarian cancer. Minimizing postoperative morbidity and improving processes of care is of paramount importance for patients’ survival and quality of life, in addition to avoiding delay in chemotherapy initiation.

Disclosures The authors have no conflicts of interest to declare.

#854 TISSUE EXPRESSION AND PROGNOSTIC ROLES OF CXCL12 AND CXCR4 IN HIGH-GRADE SEROUS OVARIAN CARCINOMA

Hyunj Lim*, Se Ik Kim, Maria Lee, Hee Seung Kim, Jae-Weon Kim, Noh Hyun Park, Yong-Sang Song, Hyun Hoon Chung.

Seoul National University College of Medicine, Seoul, South Korea.

Abstract

Introduction/Background C-X-C motif chemokine ligand 12 (CXCL12), also known as stromal cell-derived factor 1, binds the G-protein-coupled C-X-C motif chemokine receptor 4 (CXCR4). The complex plays an essential role in cancer cell proliferation, invasion, metastasis, and therapeutic resistance. Recently, CXCR4 is also an emerging target as recent studies reported that inhibition of CXCR4 enhanced the effect of anti-programmed death-ligand 1 (PD-L1) immunotherapy. Thus, we aimed to investigate tissue expression of CXCL12 and CXCR4 in high-grade serous ovarian carcinoma (HGSOC) and to determine their potential as prognostic markers.

Methodology We used chemotherapy naïve, formalin-fixed paraffin-embedded (FFPE) primary ovarian cancer tissues obtained from patients with advanced-stage HGSOC at the time of primary cytoreductive surgery. After histological reassessment, we constructed a tissue microarray (TMA) by embedding three cores (2 mm in diameter) per patient in new recipient FFPE blocks. Immunohistochemical staining for CXCL12 and CXCR4 was performed using 4 µm thick TMA sections. The expression level of each protein was dichotomized into high versus low expression. Thereafter, clinicopathologic characteristics and survival outcomes were compared between the high and low expression groups.

Results

A total of 82 FIGO stage IIIC-IV HGSOC patients were included. High expressions of CXCL12, CXCR4, and both were observed in 23.2%, 50.0%, and 15.9% of patients, respectively. Expression levels were not associated with germ-line BRCA1/2 mutational status, FIGO stage, or residual tumor after surgery. Multivariate analysis identified high CXCL12 expression as an independent poor prognostic biomarker for progression-free survival (adjusted hazard ratio: 1.990; 95% confidence interval: 1.090–3.633; P=0.025). However, CXCR4 expression was not associated with survival outcomes.

Conclusion CXCL12 expression level serves as a prognostic biomarker for HGSOC prognosis. Proteins related to the CXCL12-CXCR4 complex could be potential therapeutic targets for HGSOC treatment.

Disclosures I have no conflict of interest to declare.