

PROGNOSTIC DIFFERENCES IN TUBO-OVARIAN HIGH-GRADE SEROUS CARCINOMA STAGE IIIC

Ivana Djordjević¹, Jelena Grujović¹, Irena Conić^{2,3}, Aleksa Stefanović⁴, Milan Trenkić^{4,5}, Jelena Milošević-Stevanović^{4,5}, Predrag Vukomanović^{4,5}

Quantitative variations in peritoneal carcinomatosis and primary pelvic tumor size (TS) may reflect the diversity in high-grade serous carcinoma (HGSC) stage IIIC. The peritoneal cancer index (PCI) provides accurate evidence about the extent and distribution of tumor volume. The study aimed to investigate whether there is a difference among HGSCs in the International Federation of Gynecology and Obstetrics (FIGO) stage IIIC based on the principal disease burden and its impact on overall survival (OS). Medical records of primary tubo-ovarian HGSCs were reviewed from January 2019 to December 2022. Patients were separated into a group with $PCI \leq 10$ and large TS (Group 1, $n = 39$) and a group with $PCI > 10$ and small TS (Group 2, $n = 36$). Group 2 was significantly more likely to have a larger volume of ascitic fluid ($p = 0.017$). Optimal cytoreduction (OC) was achieved in 53.9% of patients in Group 1 and in only 11.1% of those in Group 2 ($p < 0.001$). *BRCA1/2* mutation was significantly more frequent in Group 1 ($p = 0.012$). OS was significantly better in Group 1 versus 2 ($p < 0.001$). Multivariate analysis identified group, ascitic volume, and cytoreduction completeness as independent prognostic survival factors. The FIGO stage IIIC of HGSC should evolve from a "one-size-fits-all" approach toward a more personalized treatment strategy that incorporates surgery, chemotherapy, and targeted therapy. The localization of the main tumor burden is a factor that makes a prognostic difference in stage IIIC HGSCs.

Acta Medica Medianae 2025;64(1):33–41.

Key words: *high-grade serous carcinoma, FIGO stage, peritoneal cancer index, difference, prognosis*