

Primary Fallopian Tube Carcinoma: Clinicopathological Characteristics, Therapeutic Management and Prognostic Factors in a Cohort of 72 Patients

Mihaela-Mădălina Gavrilăscu^{1,2}, Viorel Scripcariu^{1,2}, Bogdan Filip^{1,2}, Maria-Gabriela Aniței^{1,2}, Nicolae Ioanid², Dragoș-Viorel Scripcariu^{1,2}, Ana Grigoraș^{1,2}, Ionuț Huțanu^{1,2}

¹Faculty of Medicine, Grigore T. Popa University of Medicine and Pharmacy, Iași, Romania

²First Oncological Surgery Unit, Regional Institute of Oncology, Iași, Romania

Abstract

Background: Primary fallopian tube carcinoma is a rare gynecologic malignancy with clinical and biological features overlapping epithelial ovarian cancer. Due to its low incidence, data regarding prognostic factors and optimal therapeutic strategies remain limited.

Methods: This retrospective study included patients who underwent surgical treatment for primary fallopian tube carcinoma between 2014 and 2025 at the First Oncological Surgery Unit of a tertiary cancer institut. Clinicopathological characteristics, treatment patterns and survival outcomes were evaluated. Univariate and multivariate Cox regression models were used to identify prognostic factors.

Results: Seventy two patients were included in our study. Advanced-stage disease predominated, with FIGO stage III–IV identified in the majority of cases. Neoadjuvant chemotherapy was administered to 33.3% of patients, while 95.8% received adjuvant chemotherapy. Complete cytoreduction was achieved in 75% of patients. On multivariate analysis, the use of neo-adjuvant chemotherapy was associated with poorer survival ($p=0.042$). Bilateral salpingo-oophorectomy was associated with improved survival ($p=0.031$), while FIGO stage approached statistical significance.

Conclusions: Primary fallopian tube carcinoma frequently presents at an advanced stage and requires complex multimodal management. Despite advances in molecular profiling and surgical techniques, early detection remains elusive due to the subtle and non-specific nature of symptoms and the anatomical inaccessibility of the fallopian tubes.

Keywords: primary fallopian tube carcinoma, prognostic factors, cytoreductive surgery