

Does the Overall Survival of the Resectable Periapillary Carcinomas Correlate with High Expression of p53 and ki67?

Delia Rusu-Andriesi¹, Ana Maria Trofin^{1,2}, Mihai Zabara^{1,2}, Nutu Vlad^{1,2}, Ciprian Vasiluta², Alin Vasilescu^{1,2}, Mihaela Blaj^{1,3}, Irene Spiridon¹, Ramona Cadar², Oana Lovin³, Felicia Crumpei², Eugen Tarcoveanu², Corina Lupascu-Ursulescu¹, Cristian Lupascu^{1,2}

¹“Grigore T. Popa” University of Medicine and Pharmacy, Iasi, Romania

²Department of Surgery, “St. Spiridon” Emergency Hospital, Iasi, Romania

³Department of Anesthesiology and Intensive Care, “St. Spiridon” Emergency Hospital, Iasi, Romania

Abstract

Introduction: Periapillary carcinomas represent a group of tumors that develop in a complex area, implying different anatomical structures. The most common histological type of periapillary carcinomas is the adenocarcinoma. The pancreatic type of periapillary adenocarcinomas has the worst prognosis. Immunohistochemical markers, such as ki-67 and p53, can be used in predicting survival.

Material and method: we selected the patients with periapillary adenocarcinomas, intestinal or biliopancreatic type, with resectable tumors, and we performed immunohistochemical stains for ki-67 and p53 markers. The overall survival was analyzed according to the expression of immunohistochemical markers, TNM staging, tumor grade and perineural invasion.

Results: Sixty-seven patients were included in the study. The median overall survival for the whole cohort was 12 months, with a 2-year survival rate of 25%. High rate of tumor proliferation (ki67 more than 80%) was significantly associated with shorter overall survival (median survival 3 months compared with 17 months for the group with ki67 index less than 80%). A high expression of p53 protein has been associated with low overall survival. The low survival was associated with poorly differentiated tumor grade and lymph node status.

Conclusion: Both immunohistochemical expression of ki67 and p53 can be used as prognostic and predictive factors for overall survival of patients with resectable periapillary adenocarcinomas.

Key words: periapillary adenocarcinomas, ki-67, p53, survival, prognosis