

THE IMPACT OF PERIOPERATIVE ALLOGENIC BLOOD TRANSFUSION ON LONG-TERM SURVIVAL OF PATIENTS SURGICALLY TREATED FOR ESOPHAGEAL CANCER

Dott. DEJAN VELIČKOVIĆ (1)(2), Dott. PREDRAG SABLJAK (1)(2), Dott. JELENA VELIČKOVIĆ (1)(2), Dott. DEJAN STOJAKOV (1)(2), Dott. VLADIMIR ŠLJUKIĆ (1)(2), Prof. PREDRAG PEŠKO (1)(2)

(1) Clinical center of Serbia, Pasterova, 2, Belgrade, Serbia.

(2) School of Medicine, University of Belgrade, Belgrade, Serbia.

Argomento: Altro

Background: Esophageal cancer (EC) surgery is associated with relatively high morbidity and mortality rates and poor overall survival (OS). Impact of allogenic blood transfusion (aBT) on OS is still a matter of debate. We aimed to investigate impact of aBT on OS in homogenous population of patients undergoing surgical treatment of EC in a single center during a fifteen-year period.

Methods: Four hundred- nine patients who had undergone surgical resection of EC were studied. The clinicopathological parameters and OS were compared between 170 patients (41,6%) who received perioperative aBT and 239 patients (58,4%) who did not.

Results: At the moment of study completion, 124 (30.3%) patients were still alive. In the group of 285 (69.7%) non-survivors, 230 (80.8%) died of the recurrent disease, 5 (1.7%) during the course of adjuvant therapy, whereas 50 (17.5%) succumbed to causes unrelated to esophageal cancer. Compared to the non-transfused patients, patients who received aBT had lower preoperative hemoglobin level, more comorbidities, and more advanced stage of the disease as reflected by tumor diameter, nodal metastases, perineural invasion and the need for multiorgan resection. Transfused patients suffered more frequently from major postoperative complications (26/170 (21.5%) versus 13/239 (5.7%), $p < 0.001$) and had a significantly longer hospital stay (17 vs 15 days, $p < 0.001$). Multivariate analysis identified tumor grade ($P = 0.02$), perineural invasion ($P = 0.001$), N-stage ($P < 0.001$), major postoperative complications ($P = 0.01$), and comorbidity ($P = 0.04$) as independent predictors of OS in patients with EC. Perioperative aBT was not found to be the independent predictor of OS in the entire cohort, neither in the stratified sub-analysis.

Conclusion: In our study, an advanced stage of the disease and comorbidities resulted in the need for blood transfusion and the occurrence of major postoperative complications, which appeared to decrease OS in patients with EC.