Summary

Gastroenteropancreatic neuroendocrine neoplasms (GEP-NENs) are a collection of various neoplasms originating from cells of the diffuse neuroendocrine system, among which the most common are neuroendocrine neoplasms of the small intestine. Carcinoid heart disease is the main cause of death in patients diagnosed with carcinoid syndrome.

The presented series of papers deals with the issues related to cardiac complications in patients with neuroendocrine neoplasms of the small intestine. The main objective was to identify possible prognostic factors for the development of carcinoid syndrome and carcinoid heart disease, as well as factors influencing the overall survival of patients.

The retrospective study included 351 patients with histopathologically diagnosed neuroendocrine neoplasm of the small intestine, among whom 275 patients were diagnosed with well-differentiated neuroendocrine neoplasms NET G1 and NET G2, 108 patients were diagnosed with carcinoid syndrome, and 28 patients with carcinoid heart disease.

The analysis of the overall survival of patients was assessed on the basis of the Kaplan-Meier estimator as the product limit estimator (estimator of the survival function), and the prognostic value of selected laboratory tests, selected elements of diagnostic tests potentially affecting the overall survival of patients were analyzed using the Cox proportional hazards model.

Univariate analysis revealed that no primary tumor resection was significantly associated with worse overall survival in all patients with NET G1 and NET G2 small intestine neuroendocrine tumors (n=275), in patients without carcinoid syndrome and carcinoid heart disease (n=167), in patients with carcinoid syndrome (n=108) and also in patients with carcinoid heart disease (n=28).

Tricuspid valve replacement was performed in six analyzed patients with carcinoid heart disease, and in 66% of them, symptoms of heart failure improved.

The analysis of chromogranin A concentration in patients with carcinoid syndrome showed a significant relationship between the initial and maximal CgA concentration noted during observation and overall survival. Overall survival for patients with carcinoid syndrome with baseline and maximum CgA levels below the median showed as the upper limit of normal was statistically significantly associated with longer overall survival.

The results obtained in a retrospective study suggest that elevated levels of chromogranin A are associated with an active disease process in patients with neuroendocrine neoplasm of

the small intestine and are associated with poorer overall survival in patients with carcinoid syndrome.

In addition, the longer overall survival observed in patients after resection of the primary tumor may suggest that, surgical treatment should be considered if possible.

Cardiac surgery in carcinoid heart disease is associated with high risk, but may be beneficial due to the reduction of clinical symptoms of the disease.