

## SUMMARY

**Introduction:** Hemostasis is a part of homeostasis. Its effectiveness is based on the functionality of systems that stop bleeding (primary hemostasis, primary and secondary processes of activation) and fibrinolysis. These processes potentiate and antagonize each other. If external endothelial function and integrity are compromised due to external stimuli, this balance is disturbed and thrombosis or bleeding occurs. Autoregulatory mechanisms are primarily able to normalize these pathophysiological conditions to some extent. However, if the supply of platelets or coagulation factors is depleted, there is a risk of bleeding. Excessive activation of the coagulation cascade with, for example, thrombocytosis can lead to generalized arterial or venous thrombosis.

**Goal:** The main goal of this work is to confirm or refute the hypothesis that the combination of pancreatic mucosal malignancies with discontinuation of chronic antiplatelet therapy is associated with a high risk of thrombosis. Secondary goals were to investigate the effect of long-term antiplatelet therapy on long-term survival and incidence of postoperative complications after pancreatic resections performed for pancreatic malignancies.

**Methods:** This is a retrospective analysis of a prospective registry of patients undergoing surgery for pancreatic diseases in the university hospital Kralovske Vinohrady between the years 2015 and 2019. The original group consisted of 343 patients who underwent pancreatic surgery. Based on the defined criteria, a group of patients who underwent pancreatic resections for pancreatic adenocarcinoma and adenocarcinoma of Vater's papilla was selected (n = 132 patients). Another 12 patients were excluded due to non-anti-aggregation chronic medication. The resulting cohort of 120 patients was statistically processed using Kaplan-Meier analysis and Fisher's exact testing.

**Results:** The most serious finding was the fact that the most common cause of death during hospitalisation (eight patients, 6% in-hospital mortality) was thrombotic complications (four patients). Of all eight deaths, six patients had mucous malignancy and discontinued antiplatelet therapy. These results were statistically significant. A secondary finding was a statistically significant higher incidence of delayed gastric emptying in mucous producing tumours. The other monitored parameters in both groups were not statistically significant. The survival graph shows a trend of worse mucous-induced tumour outcome in combination with discontinuation of chronic antiplatelet therapy, but Log-rank tests did not confirm this trend.