

## **Abstract**

In Introduction, the author of this dissertation deals with postoperative venous thromboembolism (VTE), hereditary and acquired risk factors, prophylaxis regimens and recent recommendation of VTE prevention in surgery.

In Practical part of this work the author assesses the risk of VTE in surgical patients according to risk assessment model. Genetic testing is carried out in all patients to determine the incidence of hereditary thrombophilia and coagulation markers are measured in 28-days postoperative period. Prevalence of VTE in 1-year postoperative period is observed. The results are analysed in group of patients with benign disease (hernia and gallstone disease) and group of patients with malignancy (colorectal cancer and pancreatic cancer) separately.

The objective of this work is to determine the incidence of the most frequent thrombophilic mutations (factor V Leiden mutation and prothrombin G20210A mutation) and assess the impact of hereditary thrombophilia on incidence of postoperative venous thromboembolism in general surgery. Validation of venous thrombosis risk assessment model recommended by Czech Society for Thrombosis and Hemostasis is further objective.