Body cavity surgical procedures have been arising. The surgery is complex and often extending two hours on patiens with serious comorbidities and over 65 years of age. The major cavities are the thorax, abdomen and skull. Any body cavity surgical procedure is accompanied by touch of blood and biological membrane leading to release of tissue factor and effecting clot formation pathways. The blood is due to a clear site of procedure succkled out of a body and in most cases is not transfused back: that is why it does not affect the
coagulation pathways. If a masive bleeding is expected a cell - saving machine could be used to recuperate and retransfuse the patient's blood. The cell -saver membrane can separate large molecules and substances (fat, blood clot) but is not able to catch various cytokines and tissue factor. These are associated with clot formation pathways disturbances. Coagulation disorder is very serious leading to a massive hemorrhage which is ussualy treated with allogeneic blood transfusion. Allogeneic blood transfusion is associated with poor wound heeling and higher risk of infection complications in postoperative period. In the first part of my work the influence of coagulation system following contact a patient´s blood and biological body membrane was evaluated. I also wanted to answer the question if the influence of coagulation pathways due to heart - lung machine vary from influence due to cell - saving machine. The tromboelastografic (TEG) results show a statistically significant expression of fibrinolysis in both cases. In the second part of my work we study if allogeneic blood transfusion affect wound heeling. The results confirm that administe ring of more than 6 IU of allogeneic blood is responsible for poor outcome.