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Title: Severe gastrointestinal bleeding in association in myocardical infarction treatment

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ABSTRACT

Objective: One of severe complications during the treatment of myocardial infarction can be haemorrhage into the digestive system. **Aim of the study:** Evaluation of gastrointestinal hemorrhage in association with different therapeutic strategies of myocardial infarction in the First Department of Internal Medicine Olomouc University Hospital. **Methods:** Retrospective analysis of patients suffering from myocardial infarction who started to bleed into gastrointestinal tract during the course of myocardial infarction. Administration of blood transfusion was criterion of significant hemorrhage. Data for processing were obtained from archives of the First Department of Internal Medicine as well as from Olomouc University Hospital information system and the Department of Blood Transfusion information system. The research was finally targeting 28 patients. Thirteen women (46.3 %) and fifteen men (53.57 %). The average age was 75.93. **Results:** There were 8911 patients with acute myocardial infarction in the First Department of Internal Medicine Olomouc University Hospital from 1998 to 2009. From this amount there were 4799 patients treated conservatively. From this subgroup 11 patients bleeded into digestive system and blood transfusion administration was necessary (0.2252 %). Four of these patients died during the hospitalization (mortality 36.36 %). Remaining patients were treated with primary percutaneous intervention (PCI). Gastrointestinal bleeding occurred in 17 cases from the all PCI group (0.4134 %) and one patient died (mortality 5.88 %). Survived patients more often used hypolipidemic therapy during hospitalization than patients who died. Statistical significance of hypolipidemic medicaments had p-value =0.026. Another statistical significance was the lowest level of thrombocyte during the hospitalization (p-value= 0.049). There was notably lower platelets level in the group of patients who died in comparison with the group of survived patients. **Conclusion**: The severe gastrointestinal bleeding risk in patients suffering from acute myocardial infarction increased with PCI introduction in the

therapy in comparison with conservative strategy of the treatment. However the early mortality in the patients with gastrointestinal bleeding associated with myocardial infarction was higher in association with conservative treatment strategy than with PCI.