Main subject of this theses is acute myocardial infarction treated by percutaneous transluminal coronary intervention with implantation of stent.

The diploma paper is divided into two parts. First part, theoretical, describes present knowledge of the disease, anatomy and physiology of cardiovascular system, definition of myocardial infarction and risk factor of atherosclerosis. The atherosclerosis is the main cause of myocardial infarction.

The theses is about the etiology and pathophysiology, clinical manifestation, diagnostic, possibilities of treatment and complications of myocardial infarction. It also presents invasive cardiology which is important and irreplaceable method of treating the acute myocardial infarction.

In empiric part were used six cases of patients from intensive coronary care unit Královské Vinohrady Hospital in Prague. The theses has to compare the basic advance of nursing care of patients after the coronary intervention with or without the arteficial pulmonary ventilation. I focused on the first, most critical 24 hours. A feed-back data analysis was used in this theses.