



Univerzita Karlova v Praze

3. lékařská fakulta

**Treatment of acute myocardial
infarction in the era of percutaneous
coronary intervention**

MUDr. Jiří Knot

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When treating patients with acute myocardial infarction (AMI), a very important prognostic factor is a time from the occurrence of myocardial ischemia until achievement of reperfusion. The shortest delays are being achieved in countries with well-functioning health care network.

Another very important factor is the form of used reperfusion therapy. Between individual European countries there is a significant difference in using of reperfusion strategy in the treatment of AMI. In countries where the primary percutaneous coronary intervention (PCI) is a dominant reperfusion strategy, there is significantly higher total number of reperfused patients with AMI. In addition, a reduction in mortality related with primary PCI is in real practice higher than the randomized clinical trials report.

The aim of this work was to map the health care system for patients with AMI in five European countries and work out guidance for optimal cooperation of all segment of the health system that are involved in this care and thereby reduce individual delays.

Urgent coronary catheterization or possibly PCI is commonly provided to patients with AMI with ST segments elevation. When analyzing group of 6,602 patients with AMI it has been proven that patients with AMI with ST segments depressions (STDM) represent a comparable serious clinical entity and are getting closer, concerning therapeutic strategy and outcomes, to patients with STEMI more than patients without changes of ST segments on the initial ECG. This is precisely why, in today's „post-thrombolytic“ era, the emergent coronary catheterization with possibly subsequent intervention should be performed in all patients with acute coronary syndrome with positive troponin and changes of ST segments on ECG – it means patients with STDMI.