

Interventional cardiology in acute coronary syndrome — what is next to do?

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Abstract

A change of the paradigm in the treatment of some diseases rarely changed so radically as the strategy for the treatment of acute myocardial infarction (AMI) has changed over the last few decades. A long period with a completely passive and expectative attitude was followed by two radical revolutions. The first occurred in the eighties by introducing fibrinolytic therapy, while the other was even more spectacular, when primary percutaneous coronary interventions (PCI) were introduced, being accompanied by a significant decrease in mortality. The second wave affected us in Croatia 10 years ago, whereas intervention skills, technology and enthusiasm were the trias in the genesis of success. If we drew a cross-section today, we can ask ourselves — What is next to do? Have we reached the maximum which is followed by the plateau or is there still room for upward curve of success? This second variant seems to be more realistic. The reasons for this can be found primarily in spreading PCI to non-ST segment elevation myocardial infarction (NSTEMI), that are subject to less invasive strategy or strategy of longer waiting for PCI, significantly longer in practice than what is prescribed in the guidelines, which can explain epidemiological data of the difference in mortality between STsegment elevation myocardial infarction (STEMI) and NSTEMI in some follow-ups. Another moment is the limitations of electrocardiographic methods in the classification of AMI, which determines the treatment strategy. The differences reflected by the electrocardiographic method are not always an expression of real pathophysiologic events, so the treatment strategy should not be different. In addition to the methods of unmasking false NSTEMI and real STEMI showing terminology inadequacy of the existing names, we should take into account the technological advance in the diagnostics of AMI, as a potential moment for further jump. Imaging methods in cardiology have not yet, at least in our regions, taken their full advantage and we can expect that diagnostic hodograms will change when they become available. To conclude, we can say that there is still a lot of work to do for us to optimize the approach to the treatment of acute coronary syndrome.

Keywords

Acute coronary syndromes • Primary percutaneous coronary interventions • Ischaemic heart disease

Literature

1. Nikolić Heitzler V, Babić Z, Miličić D, et al. Results of the Croatian Primary Percutaneous Coronary Intervention Network for patients with ST-segment elevation acute myocardial infarction. *Am J Cardiol.* 2010;105(9):1261-7.
2. Mirat J. Invasive versus noninvasive approach in the treatment of nonstable angina pectoris and NSTEMI: pro and con. *Acta Med Croat.* 2009;63(1):67-70.
3. Hamm CW, Bassand JP, Agewall S, et al; ESC Committee for Practice Guidelines. ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: The Task Force for the management of acute coronary syndromes (ACS) in patients presenting without persistent ST-segment elevation of the European Society of Cardiology (ESC). *Eur Heart J.* 2011;32:2999-3054.
4. The Task Force on the management of ST-segment elevation acute myocardial infarction of the European Society of Cardiology (ESC); Steg PG, James SK, Atar D, et al. ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. *Eur Heart J.* 2012;33:2569-619.