The official journal of the Czech Society of Cardiology is at the beginning of a new era – since January 1st, 2012 we have a new publisher – Elsevier, well-recognized among scientific and medical communities in the world. First issue of the year 2012, which you have in front of you, contains 13 articles altogether: five original papers, two review articles, three case reports, one historical comment and two letters to the editor. Two papers are focusing on acute coronary syndromes (ACS). First one is dealing with patients with high risk of acute myocardial infarction (AMI) – those are the patients with AMI caused by left main (LM) coronary artery disease – acute occlusion or unstable critical stenosis of LM coronary artery [1]. Other high risk groups with AMI include elderly patients or patients with critical coronary pathology (for instance last remaining coronary artery occlusion) or patients with signs of acute heart failure. An early invasive strategy is highly recommended in this group of patients. Even emergent percutaneous coronary intervention with angiographic success rate 72% is followed by a very high mortality rate – 25,8% – in patients with acute LM occlusion.

Second, review article is focusing on recent developments of antiplatelet therapy in ACS [2]. First one discussed is a third generation thienopyridine – prasugrel, second one is ticagrelor – direct acting inhibitor of P2Y12 receptor. Both drugs have been already evaluated in patients with ACS in randomized clinical studies [3,4]. These studies showed that prasugrel with aspirin was superior to clopidogrel with aspirin, as well as that ticagrelor was superior to clopidogrel. These results “pushed” ahead evaluation of genetic variations of cytochrome P450 2C19 and polymorphisms of P-glycoprotein, which can affect clopidogrel or prasugrel transport and efficacy. Results of genetic studies and platelet reactivity testing are discussed in this article and it can be concluded that their widespread use is currently not recommended in clinical practice. On the other hand, we have enough evidence that prasugrel and ticagrelor are potent drugs, which may replace clopidogrel in the near future—recent guidelines of European Society of Cardiology already recommend these drugs as first line treatment [5]. The important issue is still their price, substantially higher than with clopidogrel. But cost analysis which was performed in TRITON-TIMI 38 Trial showed that at a median 14,7 months follow-up average total costs were US$ 228 lower with prasugrel compared to clopidogrel, mainly due to a lower rate of rehospitalisation with prasugrel [6]. What is necessary to remember is the fact that the use of very intense anti-platelet therapy needs a serious consideration of risk/benefit ratio. We can expect that future randomized trials investigating the role of antiplatelet therapy guided by P2Y12 reactivity will provide new data which will help in the use of therapeutic interventions for patients with ACS.

REFERENCES


