Rheolytic thrombectomy in acute myocardial infarction — first Croatian experiences

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Aim: Primary percutaneous coronary intervention (pPCI) in acute ST-segment elevation myocardial infarction with (STEMI), although very efficacious still presents a clinical challenge. Adequate removal of thrombus prior to stent implantation is an important factor determining the success of the procedure and the final clinical outcome. Rheolytic AngioJet thrombectomy performed in the coronary arteries allows successful and complete removal of massive thrombus and minimizes risk of distal embolization and no-reflow phenomenon. We present first Croatian experiences with Rheolytic AngioJet thrombectomy in primary percutaneous coronary intervention (pPCI). The paper demonstrates the procedure as performed in our catheterization laboratory and presents first clinical results in our patients. The setup and procedure of AngioJet rheolytic aspiration in pPCI is described.

Cases: Five cases of pPCI STEMI. Coronary angiogram (CAG) in all cases showed massive coronary thrombus (TIMI thrombus grade 4 & Grade 5). AngioJet Rheolytic thrombectomy was performed, thrombus removed, and culprit lesion exposed. In majority of cases primary stent implantation was possible stents in the “culprit” artery. Excellent angiographic results and favourable clinical intrahospital recovery ensued.

Conclusion: Our experience shows that AngioJet, Rheolytic thrombectomy device is an excellent option for the removal of thrombus in primary PCI, especially in cases with massive thrombus. AngioJet system is fast, less traumatic for blood vessels and more effective than the manual aspiration.

KEYWORDS: manual thrombus aspiration, no-reflow, myocardial infarction, percutaneous coronary intervention, rheolytic thrombectomy.

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