

OKRUGLI STOL: PROCJENA ISHEMIJSKE BOLESTI SRCA / ROUND TABLE: EVALUATION OF ISCHAEMIC HEART DISEASE

Prošireni sažetak / Extended abstract

Role of echocardiography in “delayed” percutaneous coronary intervention for ST-segment elevation myocardial infarction

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The patient aged 52 with arterial hypertension, hyperlipidemia, overweight (BMI 32.6 kg/m²) was treated for 12 days in an external medical institution due to chest pains with initially normal ECG. Ventricular tachycardia occurred. He was cardioverted developing anterior myocardial infarction and heart failure. No reperfusion treatment was applied.

He was transferred to our institution for angiography¹. ECG: sinus rhythm 72/min. Q wave accompanying the ST-segment elevation and negative T wave in D1, D2, aVL, QS from V1-6. Transthoracic echocardiogram showed no increased cardiac cavity size without elements of adverse myocardial remodeling. Present extensive akinesia of iv. septum, apicolateral segment of anterior wall, distal segment of posterior and inferior wall. EF Simpson 35%. Mitral valve competent, pulmonary hypertension up to 40mmHg, reduced diastolic myocardial relaxation, epistenocardic pericarditis affecting the entire cardiac circumference. The stabilization of the patient was followed by coronarography thereby verifying the proximal LAD occlusion with a fragmented view of the remaining parts of the artery by a great number of retrograde collaterals from the right coronary artery. The other two coronary arteries without significant atherosclerotic changes. LAD is to be opened and stent is to be implanted following numerous pre-dilatations, thereby achieving TIMI II flow.

After two months, the follow-up echocardiogram showed the continued reduction of kinetics of the anterior wall, but significantly better than the one in the original finding. EF Simpson 45%. The follow-up catheterization maintained the stent

patency in the LAD with elongated significant stenosis (70-80%), which is linked to the previously implanted stent. DES stent is implanted with an optimal result of the procedure. During the intervention, the patient complains about pains, thus indirectly indicating the myocardial viability. Retrograde collaterals from the right coronary artery are no longer present. The patient is symptom-free, hemodynamically stable, heart compensated.

Conclusion: the decision on a late, dubious²⁻⁴ but obviously successful PCI with regression of symptoms, recovery of the systolic function from 35 to 45% was primarily based on echocardiography which excluded the adverse myocardial remodeling, dilatation of the left ventricle and mitral regurgitation. The finding of epistenocardic pericarditis removed the ECG suspicion for postinfarction aneurysm.

KEYWORDS: subacute myocardial infarction, ST-segment elevation, echocardiography, percutaneous coronary intervention, left ventricular ejection fraction.

Received: 20th Mar 2013

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