15. ISCHEMIC CARDIOMYOPATHY MANAGEMENT

Author: Stepan Ion

Co-author: Grib Andrei

Scientific adviser: Lutîca Nicolae

Introduction. Ischemic cardiomyopathy is a significant impairment of left ventricular function (LVEF ≤35%) resulting from coronary artery disease. It can be due to prior myocardial infarction or from reversible loss of contractility due to chronically ischemic but still viable myocardium (stunned or hibernating).

Case presentation. A 68 years old male presented at the emergency department complaining of mild exertion shortness of breath (SOB) and angina - several episodes per day lasting about 10-15min which worsened 3 days before. ECG: symmetrical, deep, inverted “T” waves consistent with type 2 “Wellens Syndrome". Troponin I – negative on serial testing. Echocardiography: severe LV enlargement (LVDD – 69mm), moderately impaired LVEF – 34%, anteroseptal and anterior wall hypokinesis, grade III mitral valve (MV) regurgitation (vena contracta 9mm). Optimal medical therapy (OMT): β-blockers, nitrates, trimetazidine, lisinopril and spironolactone have been initiated and titrated to maximum tolerable doses. Second day coronarography: severe (75%) stenosis in distal LM and critical stenosis in proximal LAD. Diagnosis: Ischemic cardiomyopathy, crescendo angina pectoris. Heart failure III NYHA class. The heart team didn’t achieve a sole decision in terms of the revascularization intervention: surgeons advising for CABG and MV repair, interventional cardiologists - for single stent PCI assuming the possibility for MV regurgitation improvement considering ischemic etiology. The decision has been made by the patient. Being afraid of surgery, he underwent PCI with a second generation DES- 3.5-28mm, on LM-LAD, with POT on LM with a 4.5 NC balloon. Ticagrelor 90 mg bid for 12 months and long-life high dose statin were added. At 6 months: Significant symptom improvement: no angina, SOB only on strenuous activity. Normalisation of the “T” waves on ECG. Improvement of LV dimensions (LVDD – 60mm) and function: mild reduction of the LVEF - 48% (Simpson), GLS -9.6/-11.4 %, II-nd degree MV regurgitation.

Discussion. Ischemic cardiomyopathy and myocardial revascularization.

Conclusion. The patient's choice should be always taken into account. The decision in favour of PCI appeared to be correct. However, viability testing should be done before either revascularisation intervention.