## Challenges in cardiac rehabilitation – case presentation

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**Introduction**: Coronary heart disease (CHD) is a serious disease of the cardiovascular system and one of the most common conditions in that area. Cardiovascular diseases (CVD) are generally chronic, non-communicable diseases that represent a serious public health problem worldwide. Among these diseases, CHD stands out as the most common cause of death among the world's population.<sup>1</sup>

Case report: We present 49-year-old male who was hospitalized due to anterior ST-segment acute myocardial infarction. He underwent invasive coronary angiography and emergency percutaneous coronary intervention to left anterior descending artery (coronary single-vessel disease) at the University Hospital Centre. After the intervention, sustained ventricular tachycardia (VT) is converted to sinus rhythm, and the later reoccurrence of VT is electrocardioverted with the use of therapy. After the intervention, treatment continued with mechanical ventilation and continuous analgosedation. During the stay, the patient is disconnected from mechanical ventilation, and recovery is monitored. After the procedure, the patient comes to Thalassotherapia Opatija for inpatient cardiac rehabilitation. He participates in a rehabilitation program that includes breathing and stretching exercises under the supervision of a physiotherapist, after which he performs light-intensity exercises. After admission, his risk factors for the development of CVD were identified, and standard measures of preparation for permanent independent secondary prevention were carried out. The degree of risk for the implementation of cardiac rehabilitation was very high. During the eighth day of rehabilitation in the 24-hour dynamic electrocardiogram, significant ventricular excitability was registered on two occasions, and the therapy was modified. A dyskinetic interventricular septum is also verified by echocardiography, as is severe hypokinesia of the anterior wall with reduced left ventricular systolic function (EF 32%) with spontaneous contrast and a thrombus in the aneurysmal expansion of the apical part. The patient is transferred to the Cardiology Department for further treatment and intensive monitoring. After monitoring for several days, the patient was implanted with a pacemaker. An automatic cardioverterdefibrillator is implanted. The implantation procedure went smoothly, the measurement parameters were normal, and after the fifth day, the patient was discharged home with cardiocirculatory compensation and normal blood pressure and pulse values.

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World Health Organization. Cardiovascular disease. Available at: https://www.who.int/health-topics/cardiovascular-diseases#tab=tab\_1 (September 20, 2023)

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