

## 22. SECONDARY PREVENTION OF SUDDEN CARDIAC DEATH IN PATIENT WITH ISCHEMIC HEART DISEASE



**Author:** Pruteanu Albert

**Scientific advisor:** Vetrilă Snejana, PhD, MD, Associate Professor, Discipline of Cardiology, Department of Internal Medicine, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Sudden cardiac death (SCD) is the cause of about ½ of all cardiovascular deaths, while up to 50% is the first manifestation of heart disease. The annual incidence of SCD increases with age, so in the eighth decade of life it reaches 200 cases per 100.000 population.

**Case statement.** A 68 years old man known with heart disease for about 25 years, when he suffered acute myocardial infarction, simultaneously suffers from hypertension, atrial fibrillation receiving irregular treatment. The general condition worsened 6 years ago, when he developed a syncope, being resuscitated by the application of the precordial blow, which was repeated during hospitalization on 25.09.17. On the ECG, there was sustained ventricular tachycardia, suppressed by electric cardioversion. The patient was examined at the Institute of Cardiology by echocardiography: dilation of the heart chambers, moderate hypertrophy of the LV myocardium, severe of the IVS, hypokinesia and akinesia of the basal and middle segment, posterior and lateral walls of the LV, FE LV -36%; on the ECG: tahi-bradi form of atrial fibrillation; on coronarography: absence of stenotic lesions on the coronary arteries. Drug treatment with rivaroxaban, aspirin, bisoprolol, amiodarone, lisinopril, rosuvastatin, spironolactone and furosemide was initiated. On 04/10/17 was implanted with a cardiac defibrillator (ICD) Iforia3 VR-T type VVI Biotronik. After discharge from the hospital, the patient's condition stabilized, notable that 6 electrical discharges of the ICD were recorded only in the first year after implantation. Over 6 years the patient is in good condition and continues the drug treatment for chronic heart failure; on ECG: stimulated rhythm with HR 70 b/min; ECoCG parameters show improvement.

**Discussions.** The case demonstrate the role of device therapy, additional to optimal drug therapy with angiotensin-converting enzyme inhibitors, angiotensin II receptor blockers, beta-blockers, and mineralocorticoid receptor antagonist to prevent SCD and improve condition of patients with ischemic heart disease.

**Conclusion.** Sudden cardiac death (SCD) occurs unexpectedly and is usually the result of ventricular arrhythmia in patients with structural heart disease. Implantable cardioverter defibrillator (ICD), with biventricular stimulation, has been shown to be protective for ischemic heart disease and heart failure patients with a reduced ejection fraction of <35% (HFrEF).