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Abstract

A combined approach for management of the chronic heart failure with preserved left ventricular ejection fraction and permanent atrial fibrillation: a case report

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Abstract:

Background: In this case report we are describing a combined approach for treatment of heart failure (HF) symptoms in a patient with heart failure with preserved ejection fraction (HFpEF) and permanent normosystolic atrial fibrillation (AF).

Case report: A 73-year-old male (BMI: 26.4 kg/m2) with a permanent (10 years) normosystolic AF was admitted due to worsening of HF symptoms. His NYHA functional class (FC) was II. He had a long history of arterial hypertension. He took therapy according to the current guidelines (angiotensin receptor blockers, diuretic, beta-blockers, and novel oral anticoagulants). Transthoracic echocardiography showed normal EF (57%), moderate (left atrium) LA enlargement (48 mm), and mild left ventricle (LV) hypertrophy. No symptoms of coronary artery disease (CAD) were revealed. Then, he underwent radiofrequency catheter ablation (RFA) of LA, which included antral pulmonary veins (PVs) isolation with additional LA lines on a roof, mitral isthmus and posterior wall. IC class of antiarrhythmic drugs (AAD) was added two weeks before RFA. Sinus rhythm was not achievable by direct current electrical cardioversion (DCEC) immediately after RFA. Patient was discharged and amiodarone to substitute IC class, apixaban (10 mg/day), and losartan (50 mg/day) were recommended. One month later, DCEC was repeated because of retained AF while on amiodarone and sinus rhythm was achieved for a few days for the first time in more than 10 years. TSH was found to be high (11 mU/L) and amiodarone was discontinued and sotalol (240 mg/day) started, however led to symptomatic sinus bradycardia and finally to AF recurrence on day 3 after DCEC. Patient was eligible for a pacemaker implantation, which was performed, and 3 months later underwent a redo ablation with AF termination by third DCEC. The device has been monitored regularly and revealed a single episode of AF, which was stopped on the fourth day with DCEC (200 J), as well as a 6-hour episode of AF that he developed 3 months later that resolved spontaneously within the 12 months of follow-up. HF symptoms disappeared.

Conclusion: in a normosystolic permanent AF patient with HFpEF, pathogenetic HF medical therapy along with two RFA sessions, underwent three DCEC attempts and pacemaker implantation followed by AAD therapy allowed to improve clinical symptoms of HF and to sustain sinus rhythm during one year of follow-up. This strategy led to changing the diagnosis of arrhythmia from long-lasting persistent to paroxysmal AF.

Biography:

Evgeny Gennadievich Zhelyakov is a doctor by profession and works for Moscow State University Arrhythmology Department. The area of his interest is atrial fibrillation, heart failure, interventional electrophysiology. Evgeny has 20 years of doctors and scientific practice. He also took a part in CABANA trial within 5 years.

Publication of speakers:

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