Implantation of a definitive bicameral pacemaker in a patient with dextrocardia: A challenging intervention

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Dextrocardia is a rare congenital heart condition and can often present with cardiological and systemic structural changes. We will present the case of a 68-year-old female patient with situs inversus totalis. Her signs and symptoms began in childhood with cyanotic congenital heart disease, being diagnosed with subaortic ventricular septal defect and dextrocardia. She underwent surgical correction of the septoplasty type with bovine pericardium and respective occlusion of the left-right shunt at the age of 51 years. After 16 years of this intervention, the patient seeks our health service, complaining of tachycardiac palpitations associated with dyspnea on moderate exertion and off-on syncope. Admission electrocardiogram revealed a junctional rhythm, with a heart rate of 45 beats per minute associated with the right bundle branch block and left anterior-superior divisional block. Chest x-ray cinfirmas dextrocadia. 24-hour Holter monitoring demonstrates sinus rhythm with degree atrioventricular block alternating with periods of atrial fibrillation and atrial flutter with high ventricular response, configuring brady-tachy syndrome. Transthoracic echocardiogram reveals good postsurgical status, without residual shunts, with preserved biventricular systolic function. We preserved biventricular systolic function. We proceeded with an invasive electrophysiological study that confirmed an HV interval of 80 ms. We chose to implant a permanent bicameral pacemaker to optimize anti-arrhythmic medications. Currently, the patient is asymptomatic, with no new episodes of syncope and tolerating therapeutic optimization with beta-blockers and amiodarone.

