Image in cardiology

Paced Interatrial Block in Bayés’ Syndrome

Bloqueo interauricular estimulado en el síndrome de Bayés

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A 72 year-old woman with a dual chamber pacemaker (Assurity DR, St Jude Medical, Minnesota, United States), implanted due to tachy-brady syndrome after a myomectomy for obstructive hypertrophic cardiomyopathy in 2008, presented for regular device follow-up. The patient’s history includes recurrent paroxysmal atrial fibrillation (AF) requiring electrical cardioversion, hypertension, and chronic left bundle branch block. The pacemaker operates primarily in the atrial pacing-ventricular sensing mode (AP-VS). Surface electrocardiogram revealed AP-VS with a P-wave duration of 165 ms and biphasic morphology (+/-) in inferior leads II, III and aVF (Figure A) constituting advanced interatrial block (aIAB) despite atrial pacing. A nonpaced sinus rhythm electrocardiogram 6 years ago also fulfilled the criteria for aIAB (P-wave duration 131 ms), indicating that this activation pattern was unaffected by atrial pacing (Figure B). The patient’s history is significant for recurrent paroxysmal symptomatic AF (Figure C). Chest radiograph confirmed placement of the atrial lead in the right atrial appendage (Figure D, arrow). Current treatment consists of rivaroxaban and bisoprolol. The association between aIAB and recurrent paroxysmal AF constitutes a diagnosis of Bayés’ syndrome. This condition refers to abnormal caudal-cranial activation of the left atrium owing to fibrosis of the Bachmann region predisposing patients to interatrial dyssynchrony and AF. Bayés’ syndrome has been identified in numerous patient populations, but its presence in patients with atrial pacing has not been sufficiently explored. Clinicians must be cognizant of this possibility as the early identification of this pattern suggests the need for closer monitoring of AF and prophylaxis of cardioembolic events.

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