Long-term Pacemaker Lead Malposition.
Role of Echocardiography

Malposición de catéter de marcapasos durante 9 años.
Rol del ecocardiograma

To the Editor,

Pacemaker lead malposition is a rare complication, although a few cases have been reported.\(^1\)\(^-\)\(^2\) The current level of incidence is unknown, probably because of underdiagnosis or underreporting, and treatment is controversial. In some cases, left ventricular (LV) access is through a patent foramen ovale\(^3\) or an atrial septal defect;\(^4\) in others it is through interventricular septum or sinus venosus type defects;\(^5\) atrioventricular membrane perforation\(^6\) and right ventricle apex perforation with migration through the pericardium to the LV epicardium.\(^7\)

We describe the clinical, electrocardiographic (ECG), X-ray and echocardiographic findings of a 75-year-old woman referred to our diagnostic imaging unit for echocardiography to determine a possible source of embolization, after discovery of basal ganglia infarction in a cranial tomography requested for dizziness. The patient had received a VVI pacemaker implant 9 years earlier, indicated for third-degree atrioventricular block. The ECG showed pacemaker rhythm with complete right bundle branch block\(^8\) and, if not possible, anticoagulation therapy.

To prevent these episodes, we recommend a 12-lead ECG be performed after pacemaker deployment and, if complete right bundle branch block of paced beats is found, we also recommend taking a lateral chest X-ray. If uncertainty remains, echocardiography will determine lead malposition and the identification of structural abnormalities.

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Figure 1. Long axis parasternal transthoracic echocardiography. The arrow indicates the pacemaker lead in the left ventricular cavity passing through the aortic valve.