

CARDIOVASCULAR FLASHLIGHT

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A moving heart**Marie L. Moonen*†, Laurent Davin, Patrizio Lancellotti, and Luc A. Piérard**

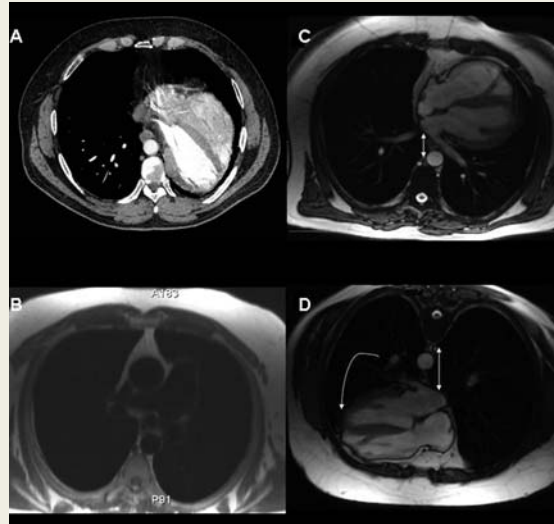
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A 44-year-old man presented for evaluation of position-dependent chest pain. He had no previous medical history. The physical examination only revealed a lateral displacement of the cardiac apical impulse into the left axilla.

ECG showed incomplete right bundle branch block and extreme QRS axis deviation. Echocardiography required unusual echocardiographic windows, and cardiac hypermobility was the most striking finding. Chest angio-CT revealed a marked change in cardiac positioning with the heart literally hanging in the chest cavity (*Panel A*). Because this configuration can be seen with congenital absence of the pericardium, an ECG-gated cardiac magnetic resonance imaging was performed to look for pericardial tissue and to rule out other causes of cardiac displacement. Axial T2-weighted spin-echo image revealed interposition of lung tissue between aorta and the main segment of the pulmonary artery, indicating the absence of the pericardium and pericardial fat in this area (*Panel B*). We had the idea to change the position of the patient on the examination table and to perform the examination in two different positions: in the dorsal decubitus position (*Panel C*) and then on a ventral position (*Panel D*), emphasizing the changing position taken by the heart, depending on the gravity.



The patient continued his activities without limitation. We are not contemplating any surgical intervention at this time. The position-dependent chest pain is attributed to torsion and strain of the great vessels or to postural distension of the ventricles.

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