

Left Ventricle Noncompaction in a Young Adult

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ARTICLE HISTORY

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We report the case of a 23-year-old young male adult, without any previous personal or family medical history, who was admitted to our department with excessive fatigue, shortness of breath and a presyncope. The physical examination revealed peripheral edemas and bilateral fine basal crackles, cyanosis and hypotension. The resting ECG showed sinus rhythm, 130 bpm, with negative T waves in II, aVF, V4–V6.

Transthoracic echocardiography revealed significant left ventricle (LV) enlargement (75/64 mm), with moderate left atrium (LA, 53 mm) and right ventricle (RV, 44 mm) enlargement and significant systolic dysfunction (LV ejection fraction 30%). LV noncompaction (LVNC) was also revealed by echocardiography (Panel A) with prominent trabeculation of the LV (green arrow) and deep recesses (red arrow), with a relatively mobile 13/15mm echo-dense mass at the apex of the LV, highly specific for thrombus.

Transesophageal echocardiography (Panel B) identified an apical thrombus (red arrow).

As LVNC is frequently associated with other congenital abnormalities, computed tomography (CT) was performed (Panel C), which revealed a ratio of 2.41 of the noncompacted to compacted layer, with no other structural or coronary artery origin abnormality (Panel D).^{1,2} The apical thrombus (red arrow) and the mid- and apical segment noncompaction (blue arrows) were also noted.

LVNC is a rare genetic cardiomyopathy, with possible late onset of the symptoms and it has to be considered at any age.³ Proper imaging techniques must be used for correct diagnosis, management and prevention of complications.

CONFLICT OF INTEREST

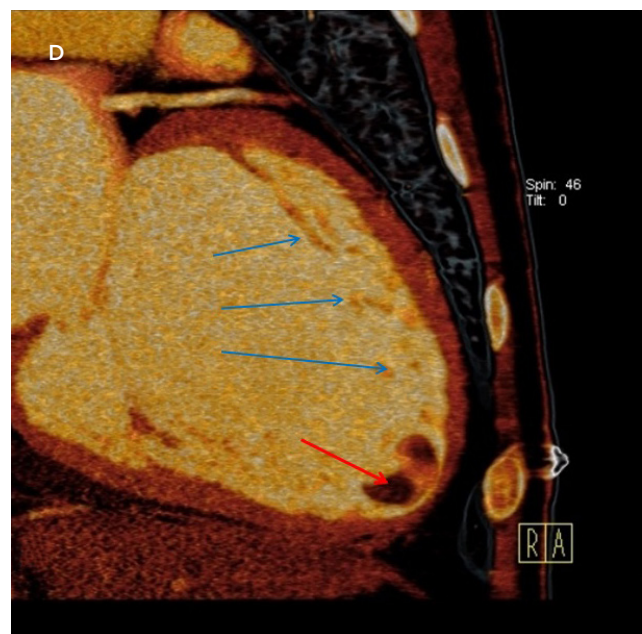
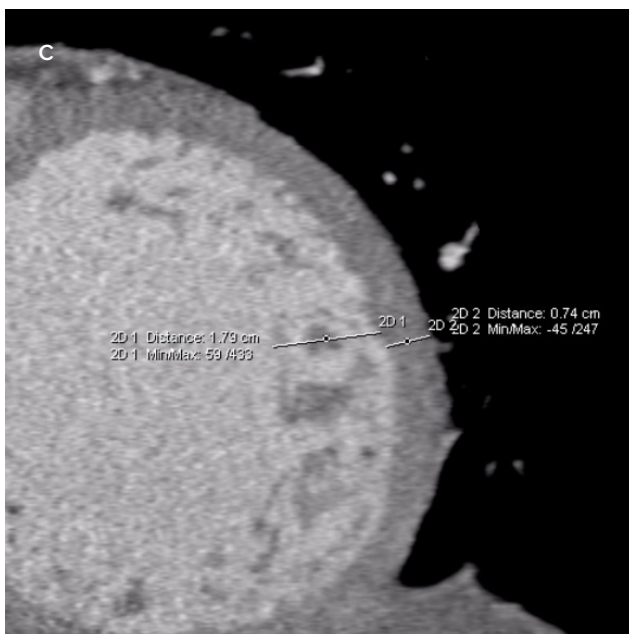
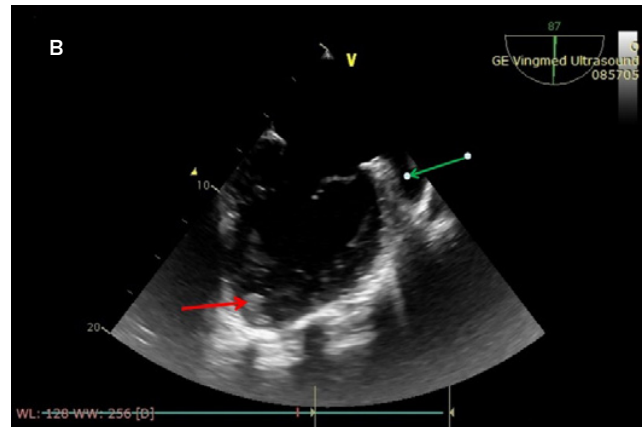
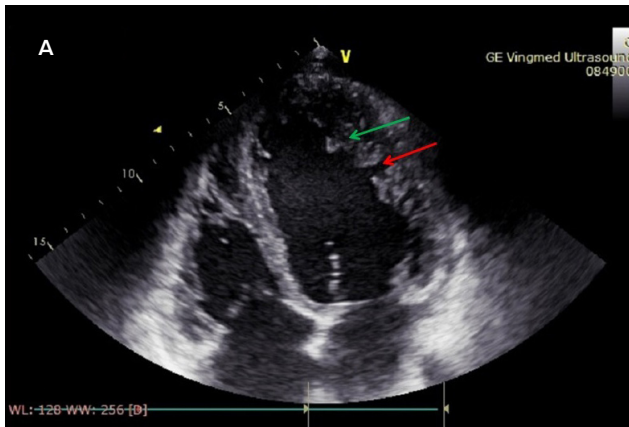
Nothing to declare.

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