Ventricular tachycardia revealing a left ventricular aneurysm

Tachycardie ventriculaire révélant un anévrisme ventriculaire gauche

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A 28-year-old black woman complained of palpitations at 3 a.m. on 23 February, 2009. She presented to our department 7 hours later. Evaluation revealed a rapid pulse rate; an electrocardiogram showed a wide QRS complex tachycardia with right bundle branch block morphology, compatible with ventricular tachycardia (Fig. 1). Arrhythmia was converted by 200 J external cardioversion. The patient had an 8-year history of intermittent palpitations. Physical examination was normal. The resting blood pressure was 110/70 mmHg and heart rate was 66 beats per minute. An electrocardiogram showed sinus bradycardia, with a normal QT interval (QTc 437 ms) and non-specific T-wave inversion in the lateral leads (Fig. 2). An X-ray showed a calcified bulge in the left heart border. On transthoracic echocardiography, the left ventricle was mildly dilated (ejection fraction 49.5%). There was no valvular lesion. Doppler examination could not be performed due to technical constraints. A calcified submitral aneurysm was noted, and its presence was confirmed on chest tomodensitometry, measuring 45 × 48 mm (Fig. 3). Routine laboratory tests showed a normal blood cell count electrolyte balance and clearance. The patient was given oral amiodarone after discharge from hospital, and has since remained asymptomatic.

This study underlines the value of echocardiography and tomodensitometry in the diagnosis of ventricular mass. Submitral aneurysms are cosmopolitan conditions. They have typically been diagnosed in black African patients with mitral valve insufficiency, heart failure, ventricular tachycardia, arterial embolism and sudden cardiac death. In Africa, tuberculosis is the primary cause, but was ruled out in our patient because the usual weight loss and clinical and radiographic signs were absent. Other causes such as trypanosomiasis, infective endocarditis and trauma were also excluded. Our young patient presented with a calcified aneurysm, which brings us to the issue of a presumed congenital basic weakness in the ventricular wall. At the calcified aneurysm stage, investigation

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Figure 1. Electrocardiogram showing wide QRS complex tachycardia with right bundle branch block morphology.

Figure 2. Electrocardiogram showing sinus bradycardia with a normal QT interval and non-specific T-wave inversion in lateral leads.
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is usually unremarkable, but may be due to laboratory constraints. In conclusion, we are reporting the case of a young Congolese woman with submitral aneurysm presenting with ventricular tachycardia, with no mitral valve insufficiency or signs of heart failure.

Conflict of interest

None.

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Figure 3. Chest tomodensitometry showing calcified submitral aneurysm (45 x 48 mm).