

Nightmare as a trigger for stress cardiomyopathy

Marc Arcens, Stephane Noble

Department of Medicine, Cardiology Division, Structural Heart Unit,
University Hospitals of Geneva, Geneva

A 67-year-old female was admitted to the emergency department with moderate dyspnea that escalated into oppressive chest pain after 4 hours. She had mild hypertension (153/107 mmHg) and sinus tachycardia (110 bpm). The electrocardiogram showed a left axis deviation without any signs of ischemia and a corrected QT interval of 471 ms (Fig. 1A). The biological markers showed a N-terminal-pro-B-type natriuretic peptide level of 1513 ng/L, peak troponins of 3502 ng/L, and peak creatine kinase of 306 U/L. The transthoracic echocardiogram (TTE) showed severe apical dysfunction with a left ventricular ejection fraction (LVEF) of 25% (Fig. 1B, **Suppl. Video 1, Part 1**). A left ventriculography (Fig. 1C, **Suppl. Video 1, Part 2**) and coronary angiography (Fig. 1D, E) revealed a typical apical ballooning pattern during systole and no coronary lesions. A follow-up TTE at

2 weeks showed improvement in the contractility of the apex with a LVEF of 45% (**Suppl. Video 1, Part 3**).

Stress cardiomyopathy is a diagnostic challenge due to its similarity to acute coronary syndrome. It is characterized by the absence of obstructive coronary artery disease, a transient decrease in LVEF, and is triggered by various stressors, including psychological distress such as a romantic breakup. It is sometimes referred to as “broken heart disease”. It can also be caused by physical stress such as trauma, accident, aggression, rape, surgery, or sepsis. In the present case, a stressful nightmare was the only incriminating stressor, a rare etiology described once in 2015. The patient’s nightmare was similar to the Paris attacks in November 2015 at the Bataclan nightclub.

Conflict of interest: None declared

Address for correspondence: Dr. Marc Arcens, Structural Heart Unit, Cardiology Division, Department of Medicine, University Hospitals of Geneva, Rue Gabrielle-Perret-Gentil 4, 1211 Geneva, tel: (+41) 795533149, e-mail: marc.arcens@hcuge.ch

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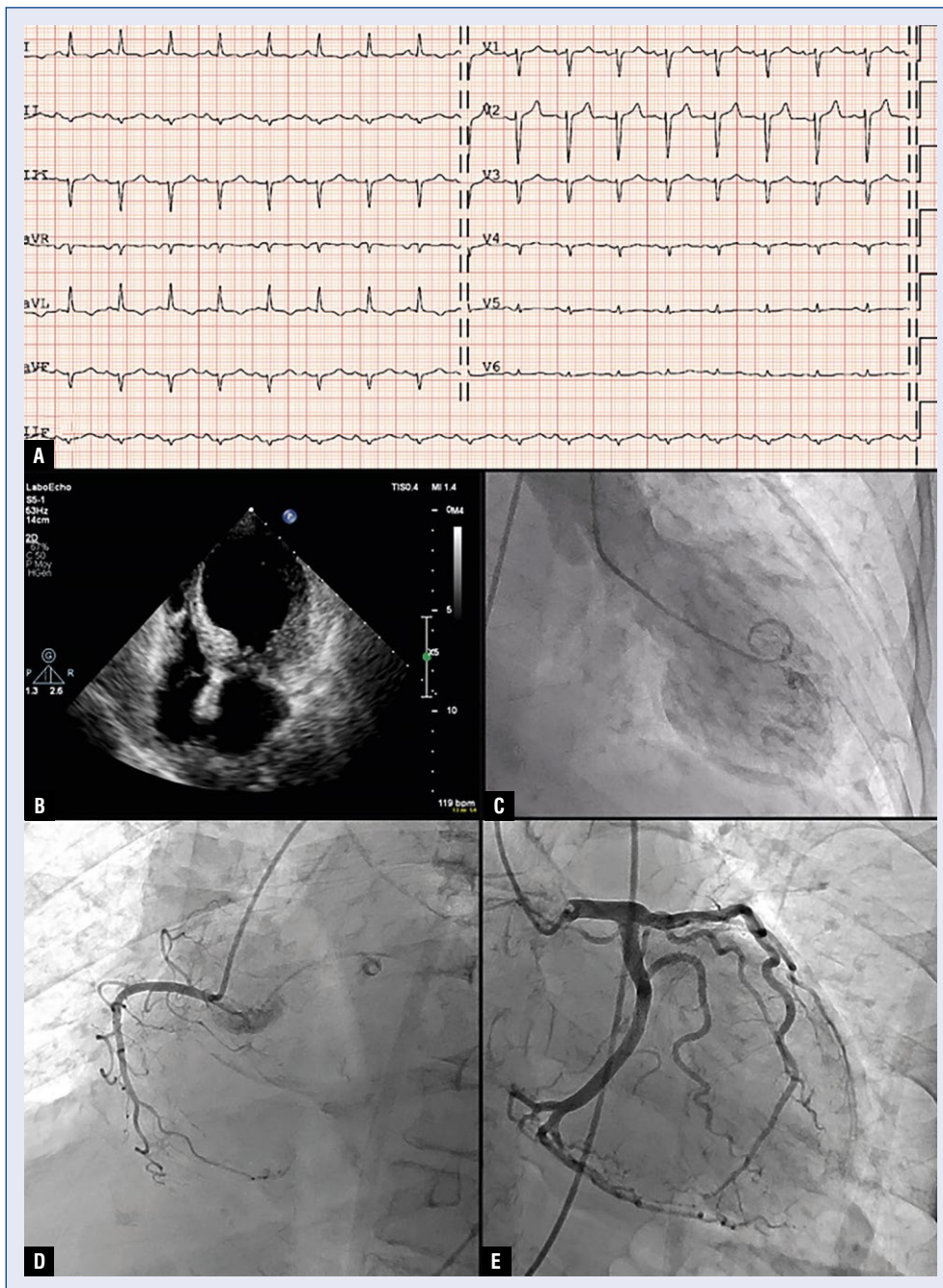


Figure 1. A. Twelve-lead electrocardiogram, left axis deviation with no signs of ischemia and presented a corrected QT interval of 471 ms; B. Echocardiogram, end-diastolic; C. Left ventriculography, end-diastolic; D, E. Right and left coronary angiography, no significant lesions.