

**CARDIOVASCULAR FLASHLIGHT**

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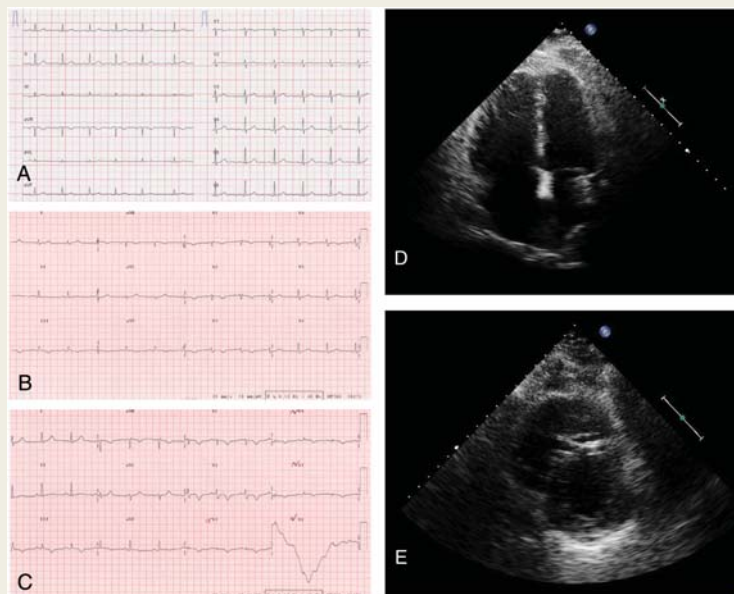
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**Isolated right ventricular ballooning syndrome: a new variant of transient cardiomyopathy****Barbara E. Stähli, Frank Ruschitzka, and Frank Enseleit\***

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\* Corresponding author. Tel: +41 44 255 58 42, Fax: +41 44 255 48 59, Email: [frank.enseleit@usz.ch](mailto:frank.enseleit@usz.ch)**This paper was guest edited by Prof. Frank E. Rademakers, University Hospital Gasthuisberg, Leuven, Belgium**

We describe the first case of an isolated right ventricular (RV) 'Tako-Tsubo' cardiomyopathy. A 68-year-old woman was referred to the intensive care unit (ICU) due to acute right heart failure occurring after laparoscopic abdominal wall hernia repair. New T-wave inversions were documented in leads V2–V4 and V3R–V5R (Panels B and C), and troponin T (0.46 ng/mL) was elevated. Coronary angiography was completely normal. Echocardiography revealed a severely dilated RV (end-diastolic area = 27 cm<sup>2</sup>) with reduced fractional area change (fac = 17%) and reduced longitudinal shortening (tricuspid annular motion = 16 mm). Moreover, the right mid-ventricular lateral wall was hypokinetic, whereas left ventricular ejection fraction was fully preserved (Panels D and E; see Supplementary material online, Videos S1 and S2). Echocardiography did not support the diagnosis of arrhythmogenic RV cardiomyopathy. Any pulmon-



ary or abdominal pathology as potential cause for volume or pressure elevation was excluded by thoraco-abdominal computed tomography. Follow-up echocardiography 3 days later revealed completely normal RV size and function. Treatment consisted of intravenous fluid resuscitation, vasopressors, and inotropic drugs, and the patient fully recovered and could be discharged from the ICU 6 days after admission.

'Tako-Tsubo' cardiomyopathy is an acute cardiac syndrome characterized by transient wall-motion abnormalities, typically involving the left ventricular apex. Indeed, apical-sparing mid-ventricular variants have been described, and biventricular involvement is observed in approximately one-third of the patients. However, isolated RV involvement as reported in our patient has not been documented so far. Thus, isolated RV involvement may represent a distinct manifestation of 'Tako-Tsubo' cardiomyopathy, and the pattern of left ventricular wall-motion abnormalities itself may not be pathognomonic for the diagnosis.

*Panels A–C.* Electrocardiography: (A) Preoperative electrocardiography showing normal sinus rhythm without any repolarization abnormalities. (B) New T-wave inversions in leads V2–V4 and (C) V3R–V5R on admission.

*Panels D and E.* Right ventricular dilatation on admission. (D) End-diastolic apical four-chamber view. (E) End-diastolic parasternal short-axis view.

**Supplementary material**Supplementary material is available at *European Heart Journal* online.