



## Clinical Image

## Inferior Myocardial Infarction Involving Right Ventricle: Electrocardiogram Suggesting Pulmonary Embolism<sup>☆</sup>



### Infarto inferior y de ventrículo derecho: electrocardiograma de un tromboembolismo pulmonar

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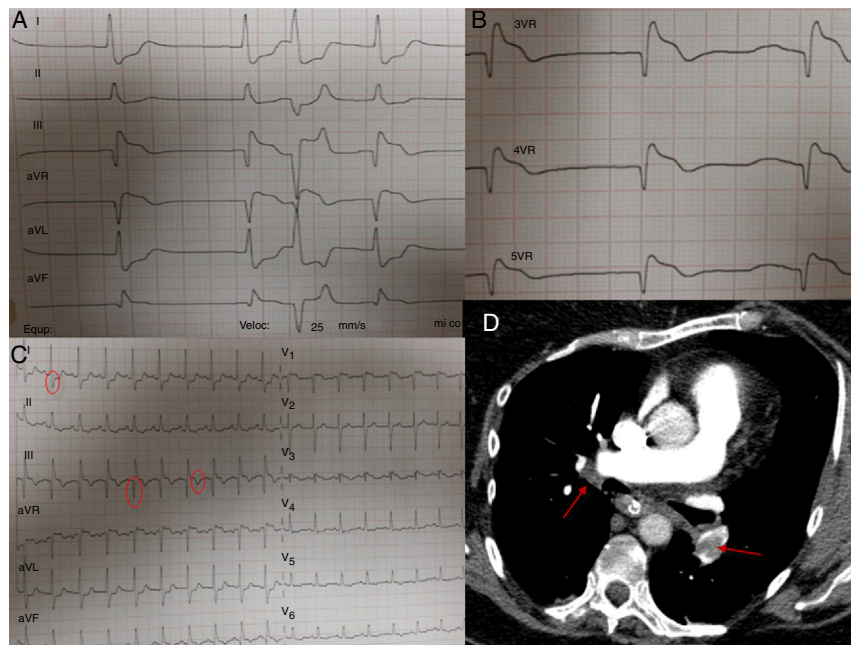
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A 58-year-old woman, hypertensive, obese, smoker, was transferred to the emergency room due to cardiorespiratory arrest in an out-of-hospital setting. The first electrocardiogram after cardiopulmonary reanimation suggested acute myocardial infarction with inferior ST elevation and right ventricular (RV) involvement (Fig. 1A and B). Echocardiogram showed severe biventricular dysfunction,

so emergency catheterization was performed that failed to reveal any coronary lesions. During the procedure, changes in blood pressure related with breathing indicative of *pulsus paradoxus* were observed, and the post-catheterization ECG (Fig. 1C) showed sinus tachycardia, ST segment normalization, and McGinn–White pattern (S1Q3T3). CT-angiogram was performed, confirming the



**Fig. 1.** (A and B) Electrocardiogram suggestive of acute myocardial infarction with inferior ST segment elevation and right ventricular involvement. (C). ECG showing McGinn–White pattern (S1Q3T3). (D). Pulmonary CT-angiogram, filling defects in the primary branches of the pulmonary arteries (arrows).

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diagnosis of massive bilateral pulmonary embolism (PE) (Fig. 1D, arrows). The patient died 4 h later, despite thrombolytic treatment. The acute pressure overload from the PE would have led to RV failure secondary to RV infarction, as detected on our patient's ECG, despite the rarity of this finding.<sup>1</sup>

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#### **Conflict of Interest**

The authors state that they had no conflict of interests.

#### **Reference**

1. Stein PD, Henry JW. Clinical characteristics of patients with acute pulmonary embolism stratified according to their presenting syndromes. *Chest*. 1997;112:974–9.