

IMAGES

Prehospital cardiac arrest secondary to isolated right ventricular infarction

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A 77 year-old man was treated for out-of-hospital cardiopulmonary arrest (CPA) secondary to ventricular fibrillation (VF). The electrocardiogram (ECG) after resuscitation showed ST segment elevation in V1-V3, so he was transferred to our center for urgent coronary angiography. A non-controlled and poorly developed acute thrombotic occlusion of the right coronary artery was observed, which was treated with angioplasty and implantation of two stents. The vessel only supplied

two small acute marginal branches of the right ventricle.

Isolated right ventricular infarction is rare and even more so as the primary manifestation as CPA due to VF in patients with non-dominant right coronary artery. The electrocardiographic ST-segment elevation in V1 to V3 can sometimes be confused with an acute anterior myocardial infarction. The leads V2R-V4R help the diagnosis.

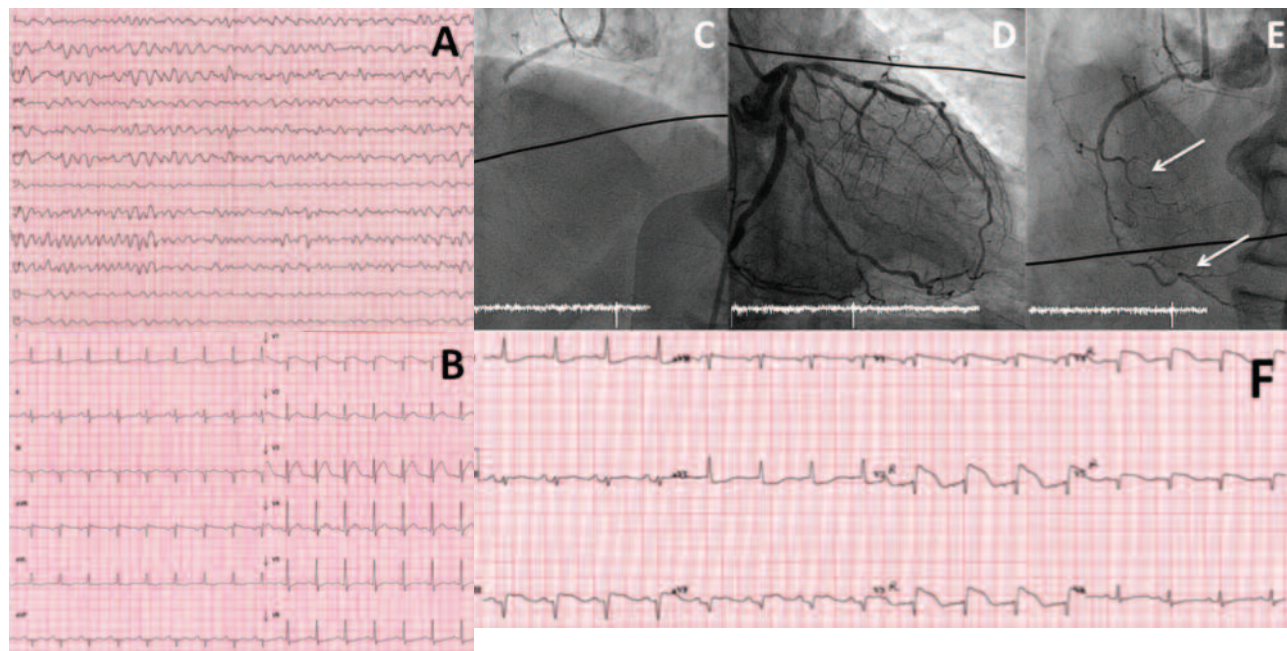


Figure 1. ECG showing ventricular fibrillation (A), responsible for the out-of-hospital cardiac arrest and after advanced cardiopulmonary resuscitation (B). Angiography showing acute thrombotic occlusion of the right coronary artery (C), a dominant left coronary circumflex artery (D) and the outcome of primary angioplasty for the non-dominant right coronary artery (E) with recovery of flow in two branches supplying the right ventricle (arrows). The ECG showing ST segment elevation in leads V4R-V2R (F) confirmed the existence of an ischemic lesion of the right ventricle.

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