

CARDIOVASCULAR FLASHLIGHT

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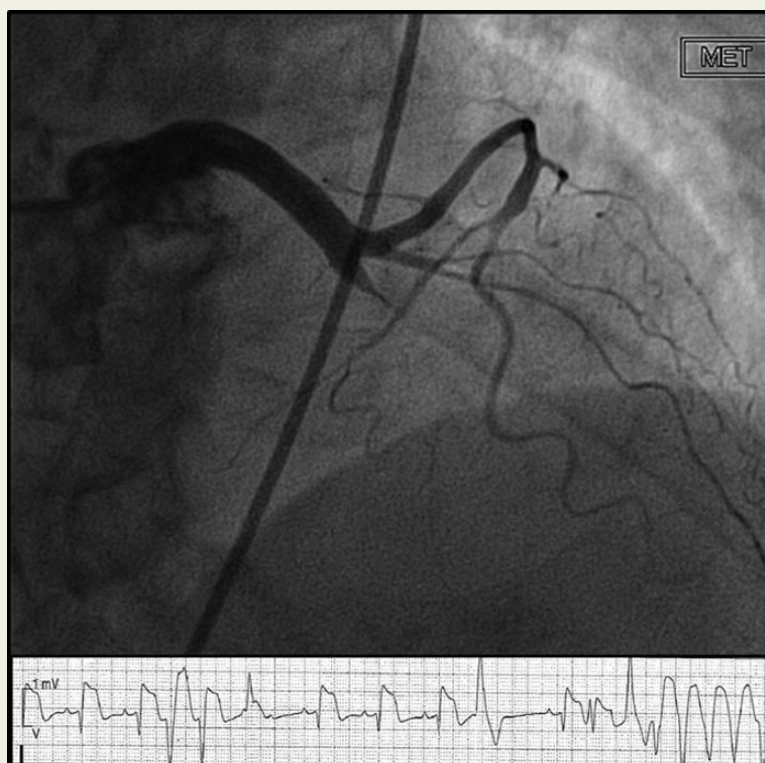
An atypical cause of malignant syncope and sudden cardiac arrest

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Coronary spasm (CS) or Prinzmetal's angina is an important cause of pectoral angina but remains difficult to diagnose. Historical descriptions presented the syndrome as a benign affection, but recent reports showed that CS could trigger ventricular arrhythmias and sudden cardiac arrest. We present the case of a 77-year-old patient referred to our hospital after several syncope. Continuous ECG monitoring during his hospital stay demonstrated recurrent episodes of sustained polymorphic ventricular tachycardia (PVT), systematically preceded by a transient but marked ST-segment elevation without chest pain. A coronary angiography was performed and showed only a non-significant atherosclerotic plaque in the left anterior descending coronary artery (LAD). However, infusion of methylergonovine induced a dramatic CS resulting in the complete occlusion of both left coronary arteries (see Supplementary material online, *Video*). Simultaneously, a marked ST-segment elevation occurred, immediately followed by a sustained PVT degenerating into VF and necessitating a cardiac resuscitation. Despite an intensive therapy combining high dose of calcium channel blocker and nitroglycerin, the patient remained symptomatic. Accordingly, an implantable cardiac defibrillator (ICD) was implanted before hospital discharge. During the early follow-up, several new episodes of VF appropriately treated by ICD shocks occurred. Finally, a selective angioplasty of the proximal segment of the LAD allowed for controlling most of the episodes, the patient being finally defibrillated only once again over a 2-year follow-up period.

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