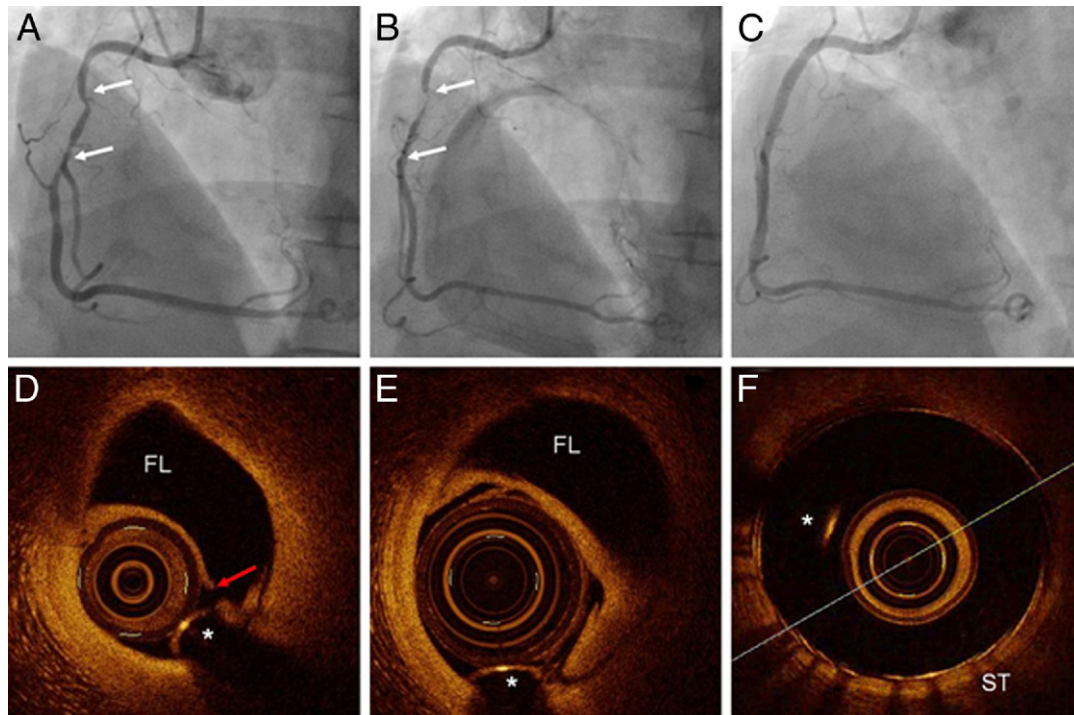


IMAGES IN CARDIOLOGY

Dizziness and Pre-Syncope

An Unusual Clinical Presentation of a Spontaneous Coronary Artery Dissection as Revealed by Optical Coherence Tomography

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A 52-year-old woman was admitted to our hospital with a 2-day history of nausea and dizziness and a subsequent pre-syncope. Because of a known bipolar disorder, an emergency psychiatric evaluation was performed and an attempted suicide as suggested by relatives was considered unlikely. Subsequently, an increased troponin T level was observed ($0.101 \mu\text{g/l}$) and coronary angiography was performed.

Coronary angiography revealed a highly variable degree of stenosis of the middle right coronary artery (**A and B, arrows**) that was unresponsive to intracoronary nitrate administration. Notably, when there was a high degree of stenosis cardiac arrhythmias, in particular sinus bradycardia and atrioventricular-block II were observed. Subsequent intracoronary optical coherence tomography readily disclosed a spontaneous coronary artery dissection (SCAD) with hematoma formation in the false lumen (FL) (**D and E**) and a visible intimal tear (**D, arrow**). The SCAD was successfully sealed by stent (ST) implantation and control coronary angiography revealed Thrombolysis In Myocardial Infarction (TIMI) flow grade 3 and a patent ST without distal propagation of the dissection (**C and F**). The patient no longer had symptoms of dizziness, and it was clearly established that the SCAD, rather than a psychiatric disorder, was responsible for the symptoms of the patient. The * indicates the optical coherence tomography catheter.