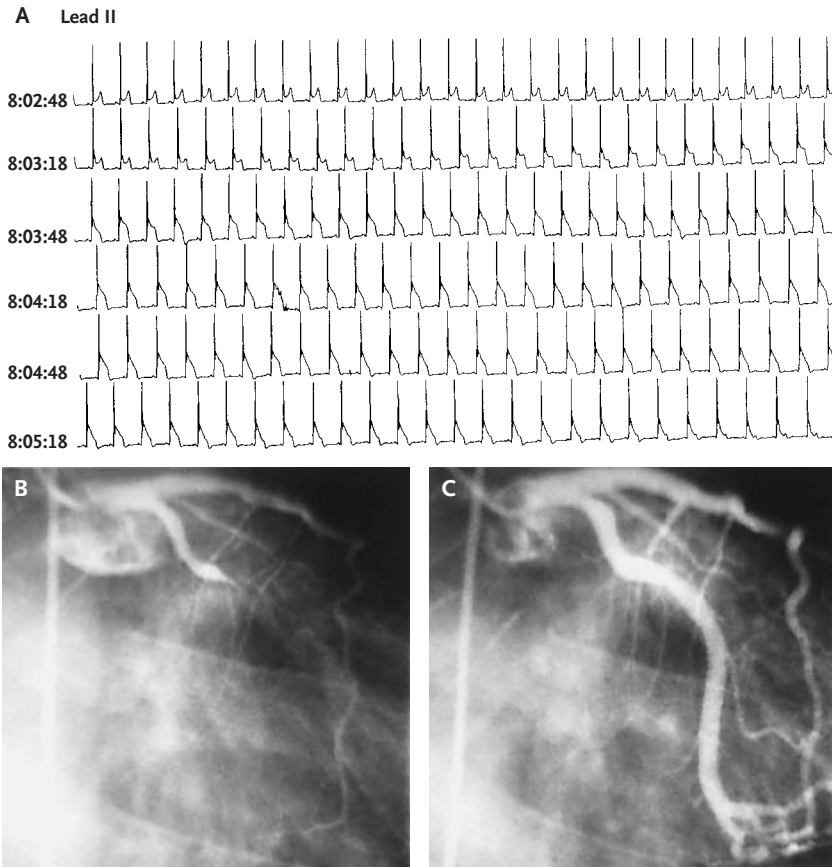


IMAGES IN CLINICAL MEDICINE

Prinzmetal's Angina



A 39-YEAR-OLD MAN WITH A HISTORY OF SMOKING, ALCOHOL ABUSE, AND cocaine use but no other medical problems presented to the emergency department with frequent episodes of chest pain, shortness of breath, and diaphoresis while at rest. The episodes of chest pain usually awakened him early in the morning and lasted a few minutes. Toxicologic screening on admission to the hospital was negative for alcohol and for controlled substances. During an episode of angina, transient ST-segment elevation (in lead II) was noted on continuous telemetry (Panel A). Video A is a continuous telemetric recording demonstrating dynamic ST-segment elevation over a period of 6 minutes and 30 seconds (but accelerated to play in 37 seconds). The baseline artifact was generated by the patient's rubbing of his chest because of chest pain.

Subsequent cardiac catheterization revealed hyperventilation-induced total occlusion of the proximal left circumflex artery (visible on angiography from the right anterior oblique caudal view, Panel B) that resolved with the administration of intracoronary nitroglycerine and diltiazem (Panel C). Video B shows this process during real-time coronary angiography. The diagnosis of Prinzmetal's angina was made. The patient's symptoms have been controlled with oral nitrates and calcium-channel blockade during a follow-up of two years.

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