A 50-year-old male patient presented with severe chest pain and right arm tightness. On arrival, he was hypotensive and had an initial slow atrial fibrillation with acute ST-segment elevation across the anterior and inferior leads (Figure 1). This required external pacing as well as atropine. The patient underwent urgent diagnostic coronary angiography that revealed a severely diseased, small-caliber right coronary artery with 100% distal cutoff before its bifurcation (Figure 2); 25% distal left main coronary artery stenosis with a diffusely diseased left anterior descending coronary artery from the ostium to the apex; and a circumflex artery with 50% proximal stenosis (Figure 3).

Intracoronary nitroglycerin and nicardipine were injected, which resulted in complete resolution of stenosis (Figure 4 and Figure 5). The ST-segment elevation on the ECG subsequently resolved, and the patient returned to sinus rhythm. The patient had a peak troponin value of 0.29 and preserved left ventricular function with no wall motion abnormalities.

Disclosures

None.

Figure 1. ECG showing ST-segment elevation.
Figure 2. Angiogram of the right coronary artery.

Figure 3. Angiogram of the left coronary artery.

Figure 4. Angiogram of the right coronary artery after vasodilator administration.

Figure 5. Angiogram of the left coronary artery after vasodilator administration.
Coronary Artery Spasm
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Circulation. 2006;113:e689-e690
doi: 10.1161/CIRCULATIONAHA.105.581678
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
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