A 42-year-old woman with a medical history of dyslipidemia presented with sudden onset of substernal chest discomfort 5 days after an episode of acute pharyngitis. An electrocardiogram showed minor concave upward ST-segment elevation in leads I, aVL, and V₅-V₆ (A). Laboratory test results revealed elevation of troponin-I and C-reactive protein. Multidetector computed tomography (MDCT) coronary angiography showed normal coronary arteries (B). Mild pericardial effusion was noted. A delayed acquisition performed 5 min after contrast injection (C) showed, on thick multiplanar reformation images, subepicardial delayed enhancement of the lateral wall (red arrows), suggesting myopericarditis. Contrast-enhanced cardiac magnetic resonance confirmed the delayed enhancement findings seen on MDCT with an excellent topographic match (D). T2-weighted cardiac magnetic resonance images (E) demonstrated a lateral subepicardial layer of high-intensity signal consistent with regional edema (white arrow).

Our case findings support the conclusion that combination of coronary angiography and delayed myocardial imaging with MDCT could be a useful alternative for the diagnosis of acute myocarditis in the emergency setting.