A 16-year-old healthy boy involved in a car accident sustained a blunt chest trauma. He was admitted to the emergency department because of severe chest pain associated with remarkable elevation of the ST-segment in the anterior leads (A). A chest computed tomography scan excluded pericardial, aortic, and major vessel disease while showing bilateral lung contusions. Electrocardiography-gated coronary computed tomographic angiography (B) detected a dissection of the proximal left anterior descending artery (curved arrow), with distal opacification of the vessel (AA = ascending aorta; LM = left main). Late gadolinium enhancement cardiac magnetic resonance (C) demonstrated an extensive acute transmural infarction of the anterior and apical wall of the left ventricle (arrowheads), with concomitant extensive microvascular damage (black arrow). Cine imaging showed regional akinesia of the anteroseptal left ventricular wall (Online Video 1). Coronary angiography (D) confirmed a focal dissection of the proximal left anterior descending artery (curved arrow).