

Image in cardiology

Coronary Hematoma After Thoracic Trauma



Hematoma coronario secundario a traumatismo torácico

Miguel Rodríguez-Santamarta,^{a,*} Daniel Mera Fernández,^b and Carlos Delgado Sánchez-Gracián^b^aServicio de Cardiología, Complejo Asistencial Universitario de León, León, Spain^bServicio de Radiología, Hospital POVISA, Vigo, Pontevedra, Spain

Figure 1.



Figure 2.



Figure 3.

A 30-year-old man with no cardiovascular risk factors presented to the emergency department complaining of chest pain. He reported receiving a hard blow to the chest while playing handball in the hours preceding symptom onset. At the time of his arrival at the emergency department, the chest pain persisted, and the electrocardiogram showed a horizontal ST segment in the inferior leads. Tests for early markers of myocardial injury were negative. Given that the patient had a low probability of coronary artery disease and that the electrocardiogram was nondiagnostic, we decided to screen for coronary artery disease using computed tomography coronary angiography. This study revealed severe stenosis in proximal right coronary artery produced by an intramural hematoma that was putting pressure on the artery at that level (Figures 1 and 2). In view of the computed tomographic findings, the patient was scheduled for invasive coronary angiography, which confirmed the diagnosis (Figure 3), and percutaneous treatment involving the implantation of a drug-eluting stent was undertaken. After the procedure, the patient remained asymptomatic and was discharged from the hospital without complications.

The most common cause of chest trauma in young persons is traffic accidents. However, nonsevere blunt chest trauma, such as that occurring in sports, can result in coronary artery injury. Computed tomography coronary angiography is the most accurate procedure for the diagnosis of this condition, and percutaneous intervention could prevent the possible complications of coronary artery lesions of this type.

* Corresponding author:

E-mail address: mrsantamart@gmail.com (M. Rodríguez-Santamarta).

Available online 20 October 2015