A 72-year-old man was admitted to the hospital for atypical chest pain lasting for 3 weeks, after having undergone coronary artery bypass graft surgery 2 years before for unstable angina pectoris pursuant to 3 vessel disease (Figure 1). A dual-chamber pacemaker was implanted at that time due to postoperative second-degree atrioventricular block. The patient became symptomatic 1 week before this admission shortly after falling in his bathroom. He complained of severe, permanent, and almost intolerable chest pain reproducible by sternal palpation. He clearly described a pain with different characteristics than during the episode of acute coronary syndrome. Clinical evaluation revealed blood pressure of 130/85 and pulse of 72, with normal cardiac and pulmonary auscultation. An electrocardiogram showed signs of an old anterior myocardial infarction with first-degree atrioventricular block and intermittent electrostimulation but no signs of acute ischemia. Palpation of the sternum was painful, and abnormal mobility was highly suggestive of sternal pseudoarthrosis. Subsequently, a chest X-ray and a computed tomography scan confirmed our clinical suspicion of sternal pseudoarthrosis (Figure 2). The patient underwent surgical reintervention for sternal reconstruction without implantation of a Ley prosthesis. The outcome was uneventful, but it took several months for the patient to be free of chest pain. The outcome was favorable even if it took several months for a full recovery. After 6 months, the patient was asymptomatic and did not experience any chest pain even on sternal palpation. The control computed tomography scan (Figure 3) showed a dramatic improvement with complete healing of the pseudoarthrosis.

In conclusion, sternal pseudoarthrosis is a rare but noteworthy complication of sternotomy with symptoms that often mimic angina, which may significantly affect quality of life. Diagnosis should be considered when chest pain recurs after coronary artery bypass graft surgery. Surgical repair was the only option with a favorable outcome but a long healing process.

Disclosures

None.
Figure 2. Computed tomography (Right) and 3-dimensional reconstruction (Left) showing severe sternal pseudoarthrosis.

Figure 3. Computed tomography (Right) and 3-dimensional reconstruction (Left) showing the result after surgery.
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