A 66-year-old man was admitted to the cardiology department of our institution because of relapsing symptoms of right-sided heart failure, with substantial ascites and peripheral edema. His medical history revealed a large anterior myocardial infarction with suspicion of myocardial rupture, for which open cardiac surgery was performed in 1993. Recent echocardiography and heart catheterization suspected constrictive pericarditis, with diastolic left and right ventricular pressure equalization (square root sign). The chest X-ray (A) and multidetector computed tomography scan revealed an “armored heart,” with extensive myocardial and pericardial calcifications (B), responsible for the constrictive diastolic filling pattern and right-sided heart failure. The diagnosis of constrictive pericarditis, caused by an old myocardial infarction and previous pericardial surgery, was confirmed. Because of multiple comorbidities, the patient was denied for pericardiectomy. Two weeks later he died of terminal heart failure.