A 45-year-old woman presented to the emergency department with a 2-day history of intermittent left-sided chest pressure with associated dyspnea and syncope on exertion. Physical examination findings and medical history were unremarkable. Chest radiograph showed calcifications along the pericardial sac (image A), and computed tomographic image of the chest revealed a dense area of calcification along the pericardium (image B). The patient was transferred to a tertiary care facility, where she underwent pericardiectomy.

Constrictive pericarditis occurs when the pericardium becomes scarred, thickened, or calcified, causing decreased cardiac volume. Cardiac surgery and radiation therapy have replaced tuberculosis as the most common causes of constrictive pericarditis. In a recent study, 53% of patients with constrictive pericarditis from radiation, cardiac surgery, or tuberculosis were found to have calcium deposits in their pericardium. Patients usually have signs of right-sided heart failure, such as jugular venous distention, pulsus paradoxus, or a pericardial knock. Patients with pericardial calcifications may be more likely to have a pericardial knock on examination. Surgical pericardiectomy should be viewed as a potential curable intervention for these patients. (doi:10.7556/jaoa.2018.089)

References