Ruptured spontaneous coronary artery dissection in a postmenopausal woman

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Spontaneous coronary artery dissection (SCAD) and rupture are extremely rare conditions with a poor prognosis. Ruptured SCAD is often fatal, unless the patient arrives late and early diagnosis can be made. It is associated with an increased rate of cardiac tamponade and requires an urgent bypass surgery. Mostly, SCAD is seen in young women (mean age of onset: 35 years) with the left anterior descending artery (LAD) being the most affected artery.[1,2] Herein, we present a clinical case of ruptured SCAD of LAD.

CASE REPORT

A 54-year-old postmenopausal female patient was admitted with a severe chest pain. Physical examination and vital signs were normal on admission. No electrocardiographic abnormalities were seen. Serum troponin level was normal. Contrast computed tomography (CT) was performed based on the suspicion of acute aortic dissection. However, CT revealed an isolated pericardial effusion. The patient was then transferred to cardiac catheterization laboratory. Catheterization showed a ruptured spontaneous dissection of LAD with a double lumen structure without any other atherosclerotic lesions (Figures 1 and 2). She was successfully managed with coronary artery bypass grafting (CABG) where the left internal thoracic artery was grafted to the LAD with cardiopulmonary bypass and the proximal LAD was ligated for bleeding management. Subepicardial hematoma was evacuated. Following a normal postoperative course, the patient was discharged in the sixth postoperative day.
cardiac tamponade and sudden death, even in case of a suspected coronary artery rupture.

The treatment strategy of SCAD solely depends on the extension of the dissection, involving coronary artery, and most importantly on the clinical presentation and overall health status of the patient. Patients with pericardial effusion or tamponade should be managed with surgery immediately. The selection of the graft and use of cardiopulmonary bypass also depends on the patient. In addition, pregnant women can be successfully managed by off-pump CABG, if surgery is indicated. Other treatment modalities include percutaneous transluminal coronary angioplasty, coronary artery stenting with cover-stents, thrombolytic and medical therapies in patients with SCAD. Spontaneous healing of SCAD has been also reported in the literature.\textsuperscript{[4-6]}

In conclusion, although rare, SCAD and rupture should be kept in mind in the differential diagnosis of acute chest pain in adult patients of all ages and sex and should be individually managed.

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