

## Spontaneous coronary artery dissection in a patient with atypical angina: a case report

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### Background

Spontaneous coronary artery dissection (SCAD) is a rare cause of acute coronary syndrome (ACS), accounting for 0.1%–0.4% of cases. Its pathophysiology involves intramural hematoma formation due to arterial wall layer separation, often triggered by emotional or hormonal stress. We report a case of SCAD in the circumflex artery (CX), confirmed by coronary computed tomography angiography (CCTA).

### Case Report

A 58-year-old female with no comorbidities, on chronic amitriptyline therapy, presented with retrosternal pain radiating to the upper limbs and dysphagia for seven days, precipitated by emotional stress. Physical examination was unremarkable. The electrocardiogram (ECG) showed sinus rhythm, right bundle branch block, and isoelectric T waves in V4–V6. Troponin levels rose from 6.357 to 13.542 ng/L. Due to nitroglycerin-refractory angina, she was admitted to the cardiac ICU.

### Management

Cardiac catheterization revealed total occlusion of the distal CX (a small-caliber vessel), treated with balloon angioplasty without stenting. Post-procedure transthoracic echocardiography (TTE) showed a left ventricular ejection fraction (LVEF) of 50% with akinesis of the mid-lateral wall. The patient was discharged on day 4 with beta-blockers and antiplatelet therapy.

### Follow-up

The patient recovered uneventfully on dual antiplatelet therapy. Outpatient evaluation revealed refractory hypertensive peaks despite bisoprolol and ramipril (initiated post-AMI). Secondary hypertension workup (polysomnography and lab tests) was negative. By the second month, echocardiography showed improved LV function (LVEF 60%), and the patient was classified as Killip I. Hypertension was attributed to prior anabolic steroid use.

### Conclusion

This case highlights the association between anabolic steroids (oxandrolone) and severe cardiovascular events in young adults, even after short-term use. The lack of clinical justification for aesthetic use and the cardiometabolic risks underscore the need for public health awareness.

### Potential conflicts of interest

Not have any potential conflict of interest to report.

### Images

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