

Spontaneous Coronary Artery Dissection (SCAD): A Series of 7 Cases, Experience of the University Hospital Center Mohammed VI, Oujda, Morocco

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Abstract

Introduction: Spontaneous coronary dissection is defined as a nontraumatic, noniatrogenic separation of the walls of the coronary artery. The clinical presentation is variable but dominated by the ACS. The diagnosis is based on viewing the false lumen by intracoronary imaging means. We report the experience of the catheterization laboratory at our center which helped to highlight seven cases of spontaneous coronary dissection.

Background: Spontaneous coronary artery dissection (SCAD), also called intramural hematoma or hemorrhage, or dissecting aneurysm, is a very rare pathology responsible for acute coronary syndrome in young and particularly female patients. The incidence of this pathology is 0.1–1.1% of patients referred for coronary angiography [3]. It predominates in young, female patients without risk factors for atheromatous disease and especially in the peripartum period. However, we registered a predominance of male sex in our series with a relatively high average age (58.85) with extremes ranging from 28 to 76 years and a single case of a young man.

Method:- A retrospective database was analyzed from Mohammed VI University Hospital Center Cath lab. Among 2000 cases of coronary angiography performed over a period of 3 years, 7 cases of spontaneous coronary dissection were diagnosed. The follow-up of these cases was assured from the discharge day to December 2017 in order to register any event like angina recurrence, acute coronary syndrome, the need of hospitalization, and death. The clinical and paraclinical data of our patients.

Results: We identified 7 patients with SCAD over the past 3 years (from September 2014 to October 2017) diagnosed by coronary angiography in Cath Lab of University Hospital Center of Mohammed VI by visualizing the radiolucent intimal flap. Baseline characteristics of these patients are described in Table 1. There were 6 men and 1 woman; the average age was 58, 85 (range 28–76) years. There were some cardiovascular risk factors in common such as male gender, active smoking, and obesity. Clinical presentation was acute coronary syndrome in 6 cases, and the right coronary artery was involved in 5 cases out of 7. SCAD diagnosis was made by coronary angiography procedure; we only identified type 1 by the visualization of a radiolucent intimal flap. Two

patients received thrombolytic therapy in the acute phase; in the first case, we identified a long dissection of the left anterior descending artery from the ostium to the middle segment with TIMI III flow, and in the sixth case, coronary angiography showed a dissection of the right coronary artery's middle segment. Percutaneous coronary intervention was performed in case number 2 due to ongoing angina pectoris, and we successfully placed a 3/22 mm drug eluting stent in the right coronary artery. All our patients received medical treatment based on dual antiplatelet therapy, statin, betablockers, and angiotensin converting enzyme inhibitor with good outcome. The mean follow-up duration was 16 (2–29) months. No angina recurrence or major cardiac event was registered during the follow-up. Other modern techniques may be useful in case of doubt, such as intravascular ultrasound, optical coherence tomography, or coronary CT angiography. The most involved artery is LAD in almost 75% of the cases described, followed by right coronary artery (RCA) in 20% of the cases, and the left main coronary artery in 6 to 12% of cases whereas the circumflex artery participates in it less frequently. However, our series shows a predominance of damage to the right coronary artery in 5 out of 7 cases.

Biography: I. Benahmed is a resident Doctor Cardiology Department, University Hospital Center Mohammed VI, Oujda, Morocco

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