

A giant left main coronary artery aneurysm

Dev sol ana koroner arter anevrizması

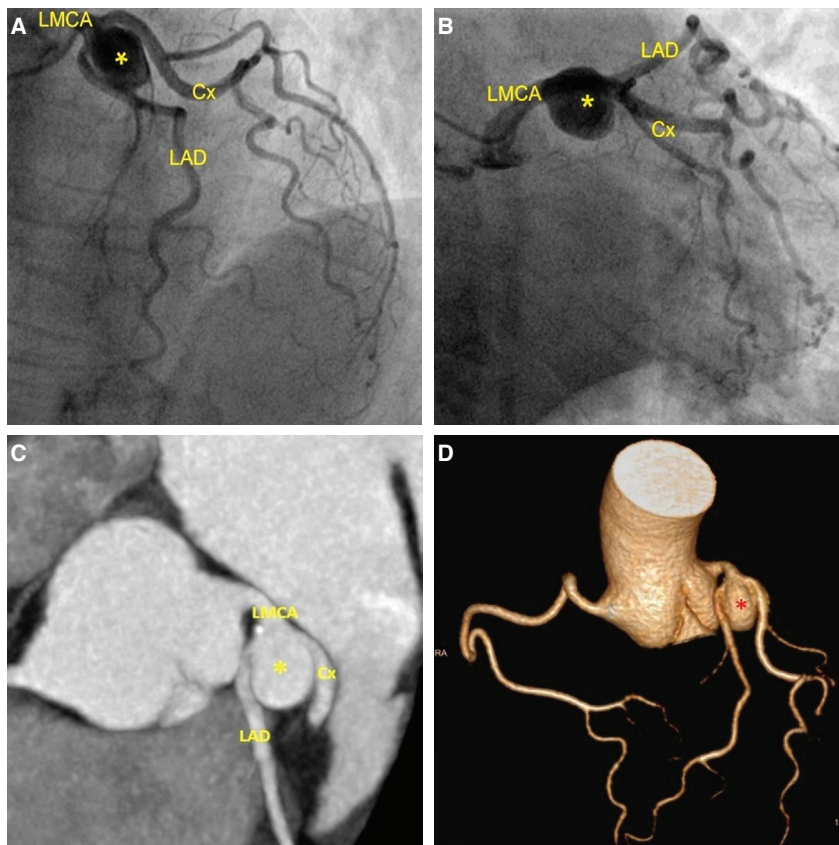
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A 67-year old woman with a history of hypertension and atrial fibrillation presented with exertional dyspnea. Her electrocardiogram was consistent with diffuse ST segment depression on the pericardial leads. The patient was referred for coronary angiography, which revealed non-obstructive coronary atherosclerosis and a giant 26x21 mm coronary aneurysm originating from the distal left main system (Fig. A and B, Videos 1 and 2**). The right coronary artery was normal, but had extensive tortuosity. Contrast-enhanced computed tomography (CT) was performed to further define the anatomy and

it confirmed the size and origin of the giant left main coronary artery (LMCA) aneurysm (Fig. C and Fig. D). After consultation, the institutional heart team decided that the huge size and proximal localization of the aneurysm precluded percutaneous options, including coil embolization and graft stenting. The risk of spontaneous rupture and possible embolic events due to thrombus formation was discussed with the patient and surgical excision was strongly suggested. However, the patient refused any kind of intervention, and therefore medical treatment including life-long oral anti-coagulation with warfarin was initiated. The patient remained event-free at the 3rd month visit with an effective level of international normalized ratio (INR). With LMCA aneurysms being so rare in the literature, there is no consensus regarding treatment of choice. Several management strategies have been reported, including conservative therapy with anti-coagulation, percutaneous covered-stent implantation and surgical procedures including ligation, and resection with or without coronary by-pass surgery. Although some reports similar to our case emphasize a favorable short-term prognosis with medical therapy, risk of sudden death due to spontaneous dissection and rupture, and thrombus formation leading to myocardial infarction or stroke should always be kept in mind for LMCA aneurysms.



(A) Angiographic image at the left anterior oblique view with 300 cranial angulation. LAD: Left anterior descending artery; Cx: Circumflex artery; *: Giant LMCA aneurysm. (B) Angiographic image at the anterior-posterior view with caudal angulation. Note the non-obstructive mild atherosclerosis and the giant LMCA aneurysm. (C) Contrast-enhanced CT image confirming origin and size of the aneurysm and excluding thrombus formation in the lumen. (D) Three-dimensional reconstruction of the CT angiography. *Supplementary video files associated with this presentation can be found in the online version of the journal.