Left colic artery aneurysm

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Left colic artery (LCA) aneurysms are rare clinical entities with an incidental diagnosis of <2% of all arterial aneurysms.[1] Diagnosis and treatment are essential, given the significant risk for rupture in up to 25% of patients and resultant mortality between 25% and 70%.[1,2] We describe a large LCA aneurysm that was successfully managed with endovascular coiling. The patient consented for publication of this report.

The patient is a 67-year-old white man, nondiabetic and ex-smoker, found to have a 2.5-cm LCA aneurysm on computed tomography surveillance evaluation for prostate cancer (*A* and *B*). He had history of atrial fibrillation, congestive heart failure, and aortic valve repair stable on medical therapy. Echocardiography did not show any vegetations. He did not have any history to suggest autoimmune etiology. Transfemoral angiography confirmed a saccular aneurysm arising from the ascending branch of the LCA (*B*) with no other pathologic change visualized in the descending branch. Selective cannulation of the inferior mesenteric artery was done with a C2 catheter with coaxial 2.4F microcatheter for the aneurysm sac. Multiple detachable Azur (Terumo, Somerset, NJ) hydrocoils of 10- to 20-mm loop of varying lengths were used for successful endovascular exclusion of the aneurysm (*C* and *D/*Cover). At 2-year follow-up, he remains stable with no residual flow in the aneurysm sac identified on computed tomography imaging.

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Only a few cases of LCA aneurysms are reported in the literature, commonly presenting with rupture. Other symptoms include abdominal pain, gastrointestinal bleeding, and syncope.3, 4, 5, 6 The LCA is the first branch of the inferior mesenteric artery and divides into ascending and descending branches.

The cause of the LCA aneurysm is least understood. It can be cardioembolic or secondary to infections, vasculitis, segmental arterial mediolysis, connective tissue disorders, degenerative atherosclerosis, or even trauma (pseudoaneurysms).[3] Indications for treatment include asymptomatic aneurysms >2 cm in size and symptomatic aneurysms.[1,3] Open surgical repair is reported in the acute rupture scenario. Endovascular embolization using detachable coils is safe if visceral perfusion is not compromised. Liquid embolic agents, covered stent, and flow-diverting stent[7] are other options but are dependent on anatomy. Procedural complications occur from thrombosis, distal embolization, inadequate landing zones, and compromising multiple branching points.

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