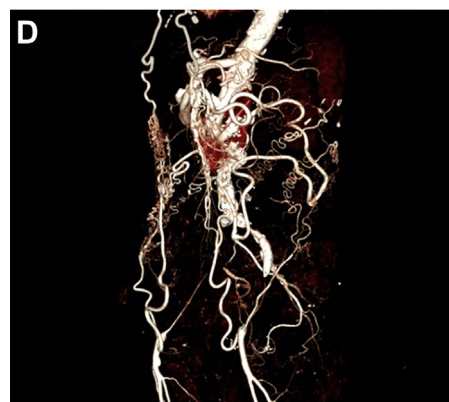
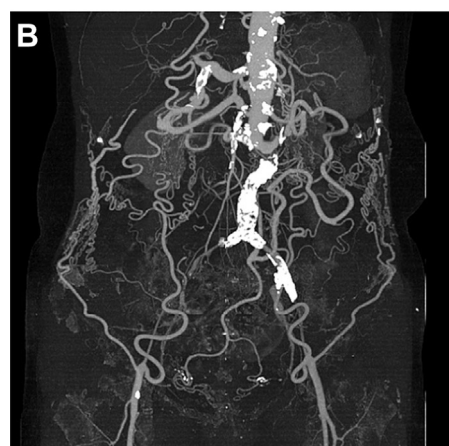


A pararenal abdominal aortic aneurysm with iliac arteries stenosis

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A 67-year-old Thai woman had a periumbilical pulsatile mass and abdominal pain for 3 months. Ultrasound imaging of the abdomen revealed a 4.8-cm fusiform dilatation of the abdominal aorta just below the superior mesenteric artery. Her medical history was significant for active smoking and hypertension. On systemic review, she had no history of low back pain, claudication, or postprandial pain. The physical examination revealed decreased femoral pulses and abnormal ankle-brachial indices of 0.57 in the right lower limb and 0.54 in the left lower limb.

Computed tomography angiography demonstrated an upper abdominal aortic aneurysm, 4.4 cm × 5.0 cm in size, just below the celiac axis origin, with involvement of bilateral renal arteries (A). Calcification along the aortic wall with diffuse thick mural thrombus in the aneurysm was seen. The diameter of the patent lumen was ~1.5 cm, and maximal thickness of the thrombus was ~1.8 cm. Length of the distal abdominal aorta occlusion was ~5.2 cm, from the lower part of the aneurysm just below the renal artery origin to 2.4 cm above the aortic bifurcation. Extensive calcification of the occluded aorta, bilateral common iliac arteries, and proximal external iliac arteries was noted (B/Cover and C). A volume-rendered image showed severe stenosis of the common iliac and external iliac arteries, with reconstitution of the bilateral common femoral arteries by bilateral deep circumflex arteries and inferior epigastric arteries via collateral pathway on bilateral abdominal walls that joined with the superior epigastric arteries and internal mammary arteries (D). Surgical repair of the aneurysm and aortoiliac occlusive lesions was offered but was declined by the patient. The patient consented to the publication of this report.



DISCUSSION

Aortic occlusive disease and aneurysmal disease are regarded as the same atherosclerotic process, but some have postulated that they are two distinct multifactorial vascular diseases that share common localization and risk factors.¹ The prevalence of occlusive disease with concomitant abdominal aortic aneurysm disease has been reported to be between 12% and 20%.²⁻⁴ Severe stenosis of the iliac arteries can cause ischemia of the lower limbs and massive collateral formation via abdominal wall and visceral vessels.⁵ Extensive calcification and severe aortoiliac occlusive lesions preclude the use of endovascular treatment. We planned an open surgical repair as the optimal method for the patient.

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