

Clinical Images

Aortic plaque rupture in the setting of acute lower limb ischemia

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Abstract. Acute aortic plaque rupture is an uncommon cause of acute lower limb ischemia. The authors report sequence computed tomographic imaging of a distal aortic plaque rupture in a young man with bilateral lower limb complications. Clinical awareness, prompt recognition and imaging, and appropriate treatment of this uncommon condition are necessary to improve patient outcomes.
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Case Report

A 43-year-old man with a history of right calf intermittent claudication and a significant smoking history presented to the emergency department with an acutely ischemic right lower limb. Multidetector computed tomographic angiography showed a distal right popliteal embolus, for which the patient was anticoagulated and underwent embolectomy and thrombolysis, with an excellent angiographic result. He was noted to have a distal aortic eccentric plaque, with no evidence of dissection or rupture (Fig. 1). Nine days following his initial presentation, the patient developed bilateral acutely ischemic lower limbs with absent femoral pulses. Repeat multidetector computed tomographic angiography (Fig. 2) revealed acute rupture of the previously documented aortic plaque with bilateral lower limb emboli, for which he required extensive embolectomies, with subsequent right above-knee amputation.

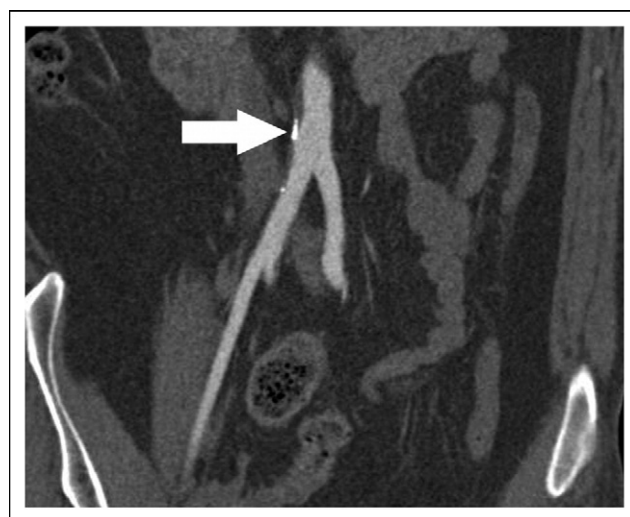


Figure 1 Multidetector computed tomographic angiogram showing a distal aortic eccentric plaque (white solid arrow).

Comments

Plaque rupture is a major cause of acute coronary syndromes¹ and symptomatic carotid disease.² Aortic

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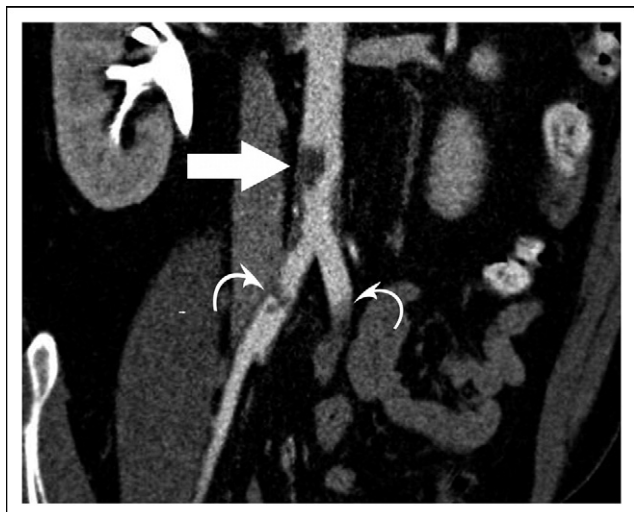


Figure 2 Multidetector computed tomographic angiogram showing acute plaque rupture (solid straight white arrow) with bilateral iliac embolization (curved white arrows).

plaque rupture is likely to have a significant role in the progression of peripheral arterial disease, particularly in the setting of acute lower limb ischemia. It is important that treating physicians be aware of this condition, as increased vigilance may lead to earlier diagnosis and perhaps better outcomes.

References

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