IMAGES IN CLINICAL RADIOLOGY







Renal angiomyolipoma rupture

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A 63-year-old woman presented to our emergency department with an acute onset of severe right flank pain and tachycardia. Abdominal computed tomography (CT) revealed massive retroperitoneal extravasation (thin arrow, Fig. A) arising from right renal angiomyolipoma (AML) containing fat density (thick arrow, Fig. A) within a non-calcified soft tissue mass. Angiography revealed an aneurysm (arrow, Fig. B) arising from renal artery, and subsequent embolization was performed successfully. The patient recovered uneventfully. Follow-up CT scan obtained seven months after embolization shows well-defined renal contour and lipomatous components of the tumor (arrow).

Comment

AML is a benign mesenchymal tumor containing mature adipose tissue, vessels, and smooth muscle. It is clinically important because of its propensity to life-threatening hemorrhage. As blood flow entering the tumor increases because of tumor growth, causing vessel dilatation and aneurysm formation resulted [1]. Acute rupture of an AML with extravasation of the contrast can be detected by enhanced CT [2]. Embolization as a treatment modality has been advocated for large tumors and symptomatic patients. Transarterial embolization for AML rupture has been advocated and is effective in treating and preventing hemorrhage [3].

References

 Chan C.K., Yu S., Yip S., Lee P.: The efficacy, safety and durability of selective renal arterial embolization in treating symptomatic and asymptomatic renal angiomyolipoma. *Urology*, 2011, 77: 642-648.

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