

Pan African Urological Surgeons' Association

African Journal of Urology

www.ees.elsevier.com/afju www.sciencedirect.com



Case report

Large aneurysm in renal angiomyolipoma causing life-threatening retroperitoneal hemorrhage



P.C. Magabe^{a,*}, W. Otele^b, L.M. Mugambi^c

- ^a Department of Radiology, Interventional Radiology Section, University of Nairobi, Kenyatta National Hospital, Kenya
- ^b Department of Urological Surgery, Kenyatta National Hospital, Kenya
- ^c Department of Radiology, Kenyatta National Hospital, Kenya

Received 8 March 2014; received in revised form 1st May 2014; accepted 17 May 2014

KEYWORDS

Aneurysm; Angiomyolipoma; Retroperitoneal hemorrhage

Abstract

Large aneurysms occurring in renal angiomyolipomas (AML) may be encountered. When present, they have a higher propensity to hemorrhage and cause catastrophic intratumoral and perirenal hemorrhages. They also tend to occur more in tuberous sclerosis-associated AML rather than in the sporadic form. A 22-year-old female presented with sudden onset of acute right abdominal pain, hematuria and fainting. At evaluation in the emergency department, the patient was found to be in hemorrhagic shock with hemoglobin of 4 g/dl and low blood pressure of 60/40 mmHg. Fullness and tenderness of the right abdominal flank was also noted. Contrast enhanced CT scan of the abdomen showed a large fatty mass of the right kidney with a surrounding perirenal hematoma. A 4.0 cm wide focus of contrast was seen within the mass highly suspicious of an aneurysm. A subsequent DSA angiogram of the right kidney confirmed the presence of the aneurysm within the mass as the cause of the hemorrhage. The patient underwent successful emergency coil and particle embolization of the aneurysm and mass with control of the bleeding. The patient was diagnosed with tuberous sclerosis syndrome with further clinical findings of cutaneous adenoma sebaceum and lung cystic changes.

© 2014 Pan African Urological Surgeons' Association. Production and hosting by Elsevier B.V. Open access under CC BY-NC-ND license.

* Corresponding author.

E-mail addresses: cmagabe@yahoo.co.uk, pcmagabe@gmail.com (P.C. Magabe).

Peer review under responsibility of Pan African Urological Surgeons' Association.

Case report

A 22-year-old female presented to the emergency department with sudden onset of acute right abdominal pain associated with hematuria and fainting. At initial evaluation, the patient was found to be pale with a hemoglobin reading of 4 g/dl and a low blood pressure of 60/40 mmhg. There was also fullness and tenderness of the right abdominal flank. Emergency resuscitation for hemorrhagic shock



Figure 1 Close-up photograph of the patient's face showing multiple small cutaneous nodules with a predominantly malar distribution confirmed to be facial angiofibromas.

was commenced with IV fluids and transfusion of four units of whole blood. Once stable, the patient on further clinical evaluation was found to have multiple painless facial cutaneous nodules with malar distribution consistent with angiofibromas (Fig. 1). Pregnancy was excluded with negative results on a serum B HCG test. Contrast enhanced CT scan of the abdomen and chest showed a large fatty mass (-50 to -70 HU) arising from the upper and middle poles of

the right kidney. There was an associated large hyper dense perirenal hematoma (Fig. 2). A 4.0 cm lobulated focus of contrast was seen within the mass highly suspicious of an aneurysm (Fig. 3). Cystic lung changes were also noted. A subsequent DSA angiogram of the right kidney confirmed the presence of the aneurysm within the mass (Fig. 4), which was the cause of the hemorrhage.

She underwent emergency embolization of the aneurysm and right kidney AML mass with coils and poly vinyl alcohol (PVA) particles respectively, with successful obliteration of the aneurysmal sac and devascularization of the mass. She had an uneventful recovery in the ward and was discharged as stable for outpatient follow-up. She was diagnosed with tuberous sclerosis in view of the above-described findings of renal AML, cystic lung changes and cutaneous facial angiofibromas. Four months post-treatment the patient was readmitted with a large perirenal abscess as a complication of the embolization. This was surgically drained with good recovery post-operation.

Discussion

Renal angiomyolipoma (AML) is a benign renal neoplasm composed of variable amounts of fat, blood vessels and smooth muscle tissues originating from perivascular epithelial cells. The blood vessels in these tumors are angiomatous with abnormal thick walls and have a characteristic absence of elastic tissue. These features

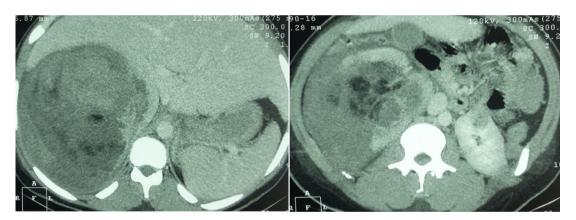


Figure 2 Contrast enhanced CT scan abdomen through the lower pole of the left kidney. An intrarenal mass with fatty hypo-attenuating components is seen. Sections through the upper pole (not shown) showed the larger extrarenal component of the mass.

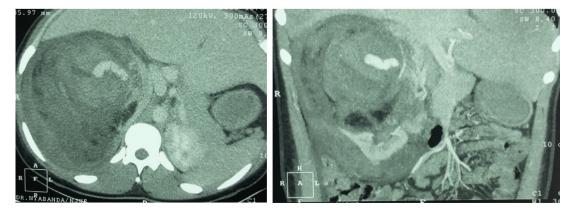


Figure 3 Coronal contrast CT abdomen shows a lobulated focus of hyper-attenuating contrast within the mass representing the pseudoaneurysm. Surrounding hyper-dense perirenal hematoma is also noted.

Download English Version:

https://daneshyari.com/en/article/4267540

Download Persian Version:

https://daneshyari.com/article/4267540

<u>Daneshyari.com</u>