



ANASTOMOSING HEMANGIOMA A RARE VASCULAR TUMOUR OF KIDNEY: A CASE REPORT

Urology

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ABSTRACT

Anastomosing hemangioma (AH) is a rare subtype of primary vascular tumor that can, clinically and radiologically, mimic malignant renal tumors such as renal cell carcinoma (RCC) and angiosarcoma. It poses a diagnostic dilemma for the clinicians because of its rarity and the overlapping features it shares with other renal vascular tumors. Here we report a case of AH that occurred in a 25 year male patient presented initially as a renal mass that was provisionally diagnosed as RCC based upon imaging. The patient was treated with Laparoscopic Right radical nephrectomy. The histopathology showed tumor tissue composed of tightly packed capillary channels with a focal anastomosing sinusoidal like pattern. As a clinician we should be aware of this rare entity as one of the possible histopathological diagnoses.

KEYWORDS

Vascular Tumour, Renal Mass, Anastomosing Haemangioma

INTRODUCTION

Vascular tumours of the kidney are rare and range from benign (hemangioma) to malignant (angiosarcoma)¹. A recent review noted that the world literature contains approximately 200 reports of renal hemangioma and 40 of renal angiosarcoma². Montgomery and Epstein described a new variant of capillary renal hemangiomas which they observed, had distinctive overlapping features of both sinusoidal and hobnail hemangioma of the skin and soft tissues. They termed the tumor "anastomosing hemangioma (AH)" because of the unique histological architecture reminiscent of splenic sinusoids³. AH though believed to be unique to the genitourinary system, with a

particular predilection for the kidneys have been reported in other sites of the body which includes the testes, thigh, abdominal wall ovaries adrenal gland, liver and the gastrointestinal tract⁴. In general, most lesions are unilateral, and the size ranges from 0.6 to 5 cm (median 2 cm)⁵. Clinical-pathological characteristics include hematuria, flank or abdominal pain, or lower urinary symptoms. Here we present a case of young male who was operated with a provisional diagnoses of RCC but the biopsy came as AH

CASE PRESENTATION

25 year male presented with complaint of Right flank pain since 2 months, during evaluation right side renal mass was found along with right lower ureteric stone and bladder stone, Rt URS and PUCL was done on 9.5.19 at Trust hospital Rajkot.

CECT abdomen was done for imaging. It showed 50x44x43 mm well defined, lobulated inhomogeneously enhancing lesion with central necrosis, involving anterior cortex of mid aspect of right kidney, lesion was extending into perinephric fat and involving Gerota's fascia in sub hepatic region, displacing renal pelvis and splaying the calyces, focal loss of fat plane with inferior surface of liver.

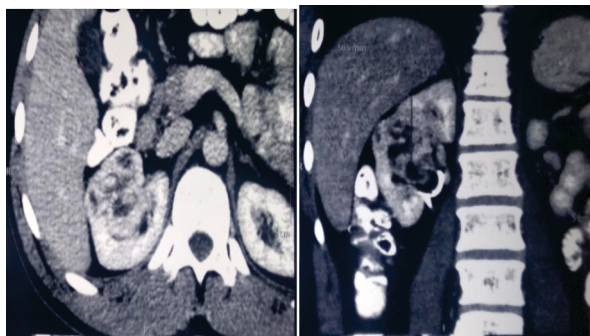


Fig 1 Preoperative CT image

Patient underwent laparoscopic right radical nephrectomy. Patient recovered well and was discharged on POD2. Grossly the tumor was 4x3.5x3.5 cm in size, soft consistency, unifocal, reddish in color with intact capsule and absent necrosis.

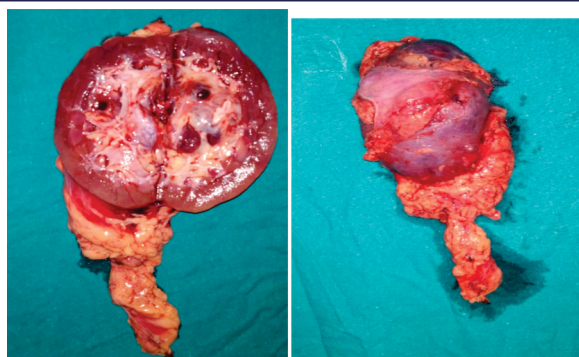


Fig2 Specimen

Section showed tumor tissue composed of tightly packed capillary channels with a focal anastomosing sinusoidal like pattern. Intermixed feeding vessels with thick walls, focal myxoid change and stromal edema were seen. Tumor abutted pelvicalyceal system and showed sinusoidal extension. Endothelial lining vessels showed focal hobnailing, F/S/O Anastomosing Hemangioma.

DISCUSSION

AH is a rare subtype of hemangioma unique to the genitourinary system, first described by Montgomery et al.⁵ Presents at wide age ranging from 21 to 83 years (median: 53 years, average: 55 years), with most patients within their fifth to sixth decades. This tumor shows a slight predilection for males, with a male to female ratio of approximately 1.4:1 (11:8). Most lesions are unilateral⁶. Clinical findings might include abdominal pain, colicky pain, lower urinary tract symptoms, and hematuria. Anastomosing hemangioma is a great mimicker of some tumors, most importantly capillary angiosarcoma. Given a lack of clinical or radiologic findings that are specific to AH, and the serious morbidity associated with a misdiagnosed RCC or angiosarcoma, nephrectomy appears to be the safest management Option.⁵

It has a typical histological architecture which bears a huge semblance of splenic sinusoids⁷. AH of the kidney shares clinical and imaging features with other vascular tumors of the kidney, with concerns for malignancy, hence the need for histopathological review and immunohistochemical studies for accurate diagnosis. It appears to run a benign course and it is amenable to surgery without evidence of disease recurrence during follow up

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