Renal Mixed Epithelial Stromal Tumour Mimicking Upper Tract TCC

Sharath DV*, Arun R. Menon**
*Junior Resident, K. S. Hegde Medical Academy, Mangalore.
**Associate Professor, Department of Urology, K. S. Hegde Medical Academy, Mangalore.

Received: Feb. 16, 2018 Accepted: March 18, 2018

ABSTRACT *Mixed epithelial and stromal tumour (MEST) of the kidney is a recently recognized distinct neoplasm that should be distinguishedfrom other renal neoplasms. Adult renal neoplasm with a variable admixture of epithelial and mesenchymal components is a distinctive benign neoplasm that has recently been recognized and termed as benign mixed epithelial and stromal tumor (MEST)[1,2] These tumours have a propensity to herniate into the collecting system. We describe a rare case of MEST with herniation of the tumour extending to the ipsilateral vesico-ureteric junction (VUJ), mimicking an upper tract Transitional cell tumour(TCC).*

Key Words: *MEST, KIDNEY, TCC.*

CASE REPORT

A 48year old female patient presented with complaints of left sided abdominal pain and hematuria of 15 days duration. A CT scan of the abdomen showed a left renal-large complex cystic mass, with tumour extending to the ipsilateral VUJ with hydronephrosis. With a provisional diagnosis of left upper tract TCC, she underwent left radical nephroureterectomy. Intraoperatively the left kidney was grossly enlarged. The left ureter was thickened. Tortuous and dilated till ~1cm proximal to bladder. Multiple enlarged para aortic lymphnodes were noted. Histopathology revealed mixed epithelial and stromal tumor with lining epithelium being transitional.stroma shows ovarian type stroma and fat. spatulate papillae and branching tubules seen.

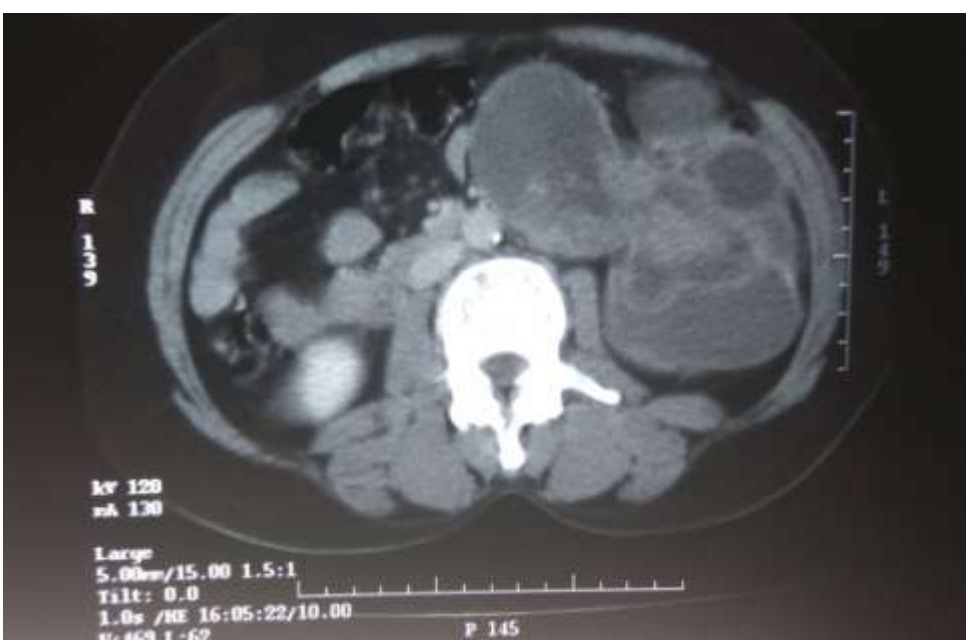
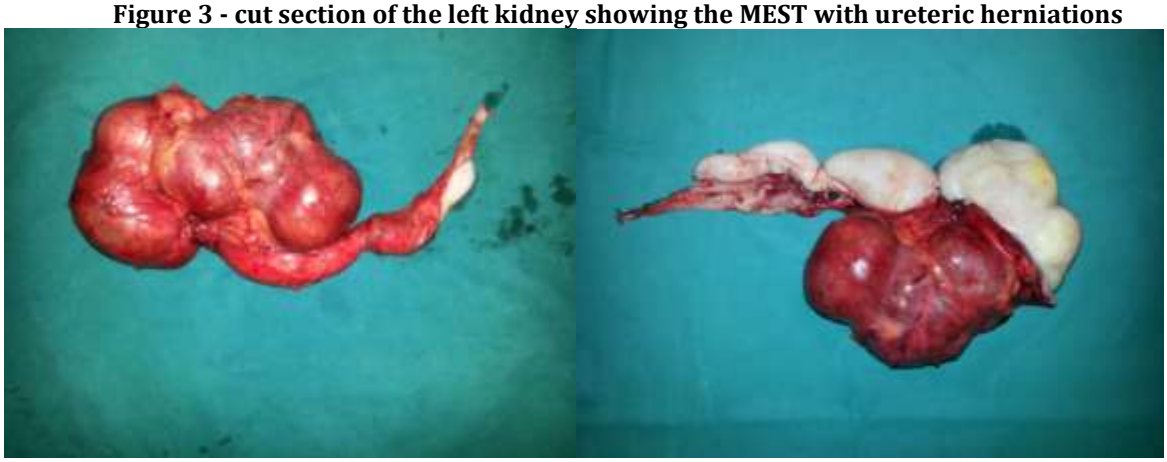


figure 1 - ct scan showing tumour in left kidney

Figure 2 - showing the left nephrectomy specimen with left ureter
Figure 3 - cut section of the left kidney showing the MEST with ureteric herniations



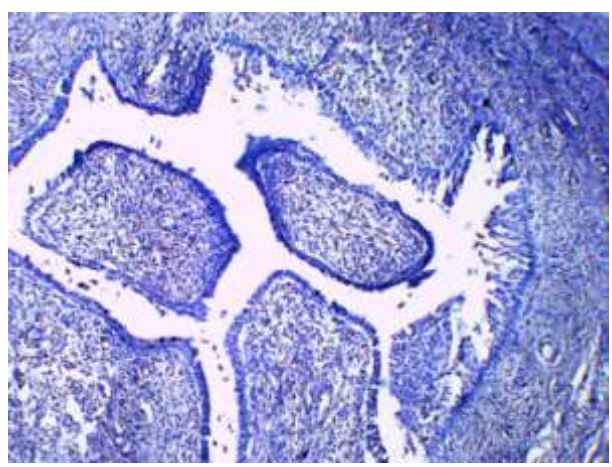


Figure 4 - Histopathology of the specimen

DISCUSSION

MEST represents a distinctive benign tumour of the kidney that should be distinguishedfrom other cystic renal neoplasms. These tumors are relatively rare with a female preponderance.

In a recent study, most of the MESTs were incidental findings[3] Imaging studies are not diagnostic but reveal a solid or solid and cystic mass in most cases. Histopathologically, these tumors reveal biphasic growth pattern comprising mesenchymal and epithelial elements with characteristic estrogen and progesterone receptor immunoreactive mesenchyme, reminiscent of ovarian stroma. Areas of heterogeneity including necrosis and calcification may be observed occasionally[4] .

These tumors have a propensity to herniate into the collecting system, mimicking upper tract TCC. These herniations are usually limited to the pelvis.

Our case is unique as the herniation extended till the VUJ, mimicking an upper tract TCC. Malignant transformation, recurrence, and metastasis in MEST are rare.Prognosis of this tumour is favourable in nearly all cases published so far.

References

1. Michal, M. and M. Syrucek . Benign mixed epithelial and stromal tumor of the kidney. Pathol Res Pract 1998. 194:445–558.
2. Adsay, V. , J. N. Eble , and J. R. Srigley . et al. Mixed epithelial and stromal tumor of the kidney. Am J Surg Pathol 2000. 24:958–970.
3. Pierson, C. R. , M. S. Schober , and T. Wallis . et al. Mixed epithelial and stromal tumor of the kidney lacks the genetic alterations of cellular congenital mesoblastic nephroma. Hum Pathol 2001. 32 (5):513–520.
4. Durham, J. R. , D. G. Bostwick , G. M. Farrow , and J. M. Ohorodnik . Mesoblastic nephroma of adulthood: report of three cases. Am J Surg Pathol 1993. 17 (10):1029–1038.