Case Report

# BENIGN MIXED EPITHELIAL TUMOR OF RENAL PELVIS; CASE REPORT

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## ABSTRACT

Cystic hamartoma of the renal pelvis is a rare benign tumour in same category as mixed epithelial & stromal tumor. We present a 37 year old female with a cystic lesion in renal pelvis, extending to pelvi-ureteric junction. She underwent nephrectomy. Histopathologically, tumour consisted of epithelial and mesenchymal cells and no evidence of malignancy. We believe that this is case of mixed epithelial and stromal tumours. The overall prognosis is good.

## INTRODUCTION

The mixed epithelial and stromal tumor is a distinctive benign neoplasm of the kidney, predominently seen in females, mostly in the perimenopausal period. These tumors are known to arise from the renal pelvis. The tumors are characterized by cystic and solid areas, most are benign although malignant change has been reported very rarely.[2,3] We report a rare case of benign tumour of renal pelvis arising in a female and treated by nephrectomy.

## PRESENTATION

A 37 year old, married female presented to urology outpatient department with the complaint of dull pain in left lumber area, radiating to loin and associated with vomiting. There was no hematuria or pyuria or associated fever.
Urine examination of patient revealed microscopic heamaturia and no malignant cell. Ultrasound of kidney, ureter and bladder (USG KUB) showed moderate hydronephrosis with a mobile cystic lesion of 6x3 cm, inside the pelvis and extending to pelvi-ureteric junction. Intravenous urography (IVU) showed a filling defect inside the renal pelvis and extending to upper ureter, associated with hydronyhrosis of moderate degree.
Computerized tomography (CT) of the patient showed 6x3 cm elongated cystic mass, arising from middle calyx and extending upto pelvi-ureteric junction. Lymph nodes of abdomen were not enlarged. There was no evidence of any metastasis in liver or lungs or other body parts.
Renal exploration was performed through lumber incision. Renal pelvic opening revealed a freely mobile, elongated cystic mass connected to/arising from middle calyx. Wider excision was not possible due to its attachment, so nephrectomy was performed. Post operative recovery was uneventful. Histopathology of specimen revealed a benign cystic epithelial neoplasm with no evidence of malignancy.

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## DISCUSSION

The mixed epitheal and stromal neoplasm is an established entity of unknown etiology. It may have cystic or solid areas, either of which may predominate.
The cyst ranges from few millimeters to several centimeters in diameter. The solid area may show spindle cells or may resemble smooth muscle cells and of mesenclhmal in origin, but they do, not show atypia or increased mitotic activity.

The epithetial component of this tumour consists of glands with variable complexity and distribution.

A possible origin of these tumours is the primary mesenchymal metanephric blastema. An alternate postulation is involvement of deranged hormones (Perimenopausal or therapeutic hormones with unopposed estrogen), which induces proliferation in periductal foetal mesenchymes.[4]

Around 50 cases of benign epithelial tumours have been reported in the literature.[2,5,6]

The most common presentation is dull to severe lumbar pain, haematuria. Preoperative radiological diagnosis of these neoplasms is difficult because of the rarity of this condition.

Mistaking these tumours as renal cell carcinoma of pelvis may result in an unnecessary nephroureterectomy.[7,8,9] Therefore when preoperative diagnosis is not certain, perioperative samples must be obtained for use as frozen sections.

In our cases, sonography, IVU and CT revealed a cystic mass with in renal pelvis extending into middle calyx. The possibility of malignant process could not be ruled out as interpretation of these investigations was difficult.

In summary a cystic lesion/hamartoma is rare condition for which preoperative radiological studies may be useful and these may be associated with fibroepithelial polyps and their presence can lead to misdiagnosis of these entities. Treatment should be conservative consisting of simple local excision and nephroureterectomy should be avoided.

## REFERENCES


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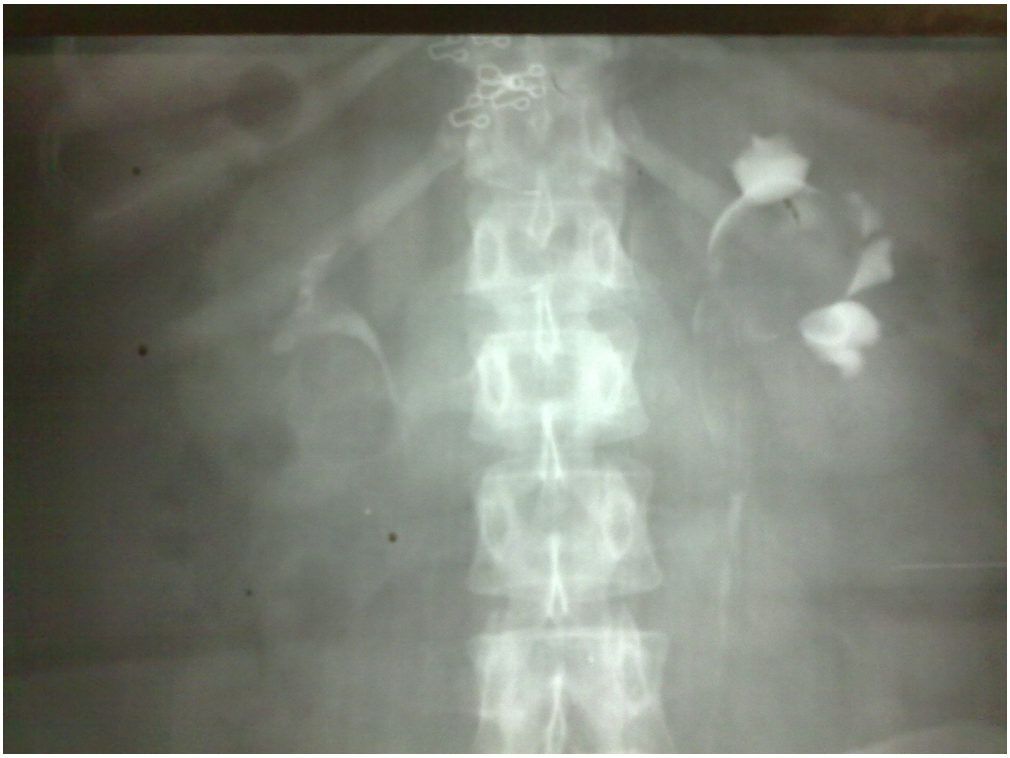
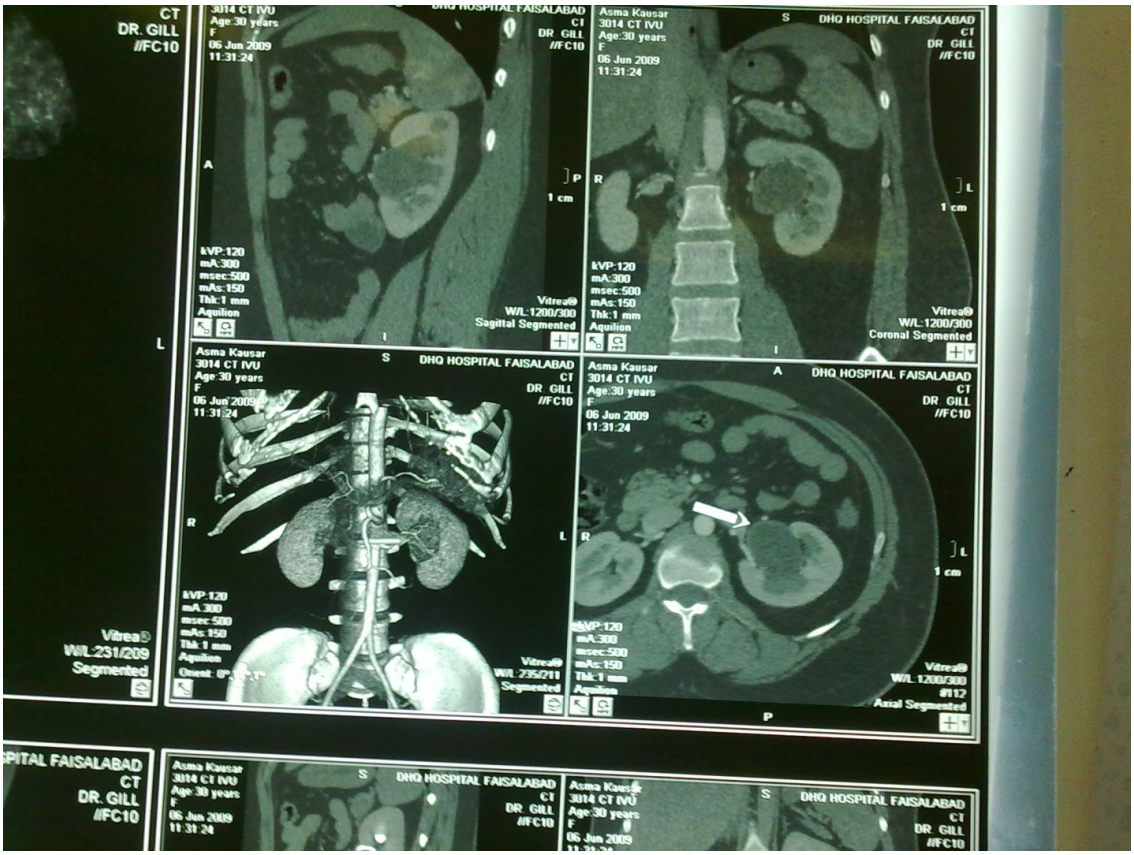
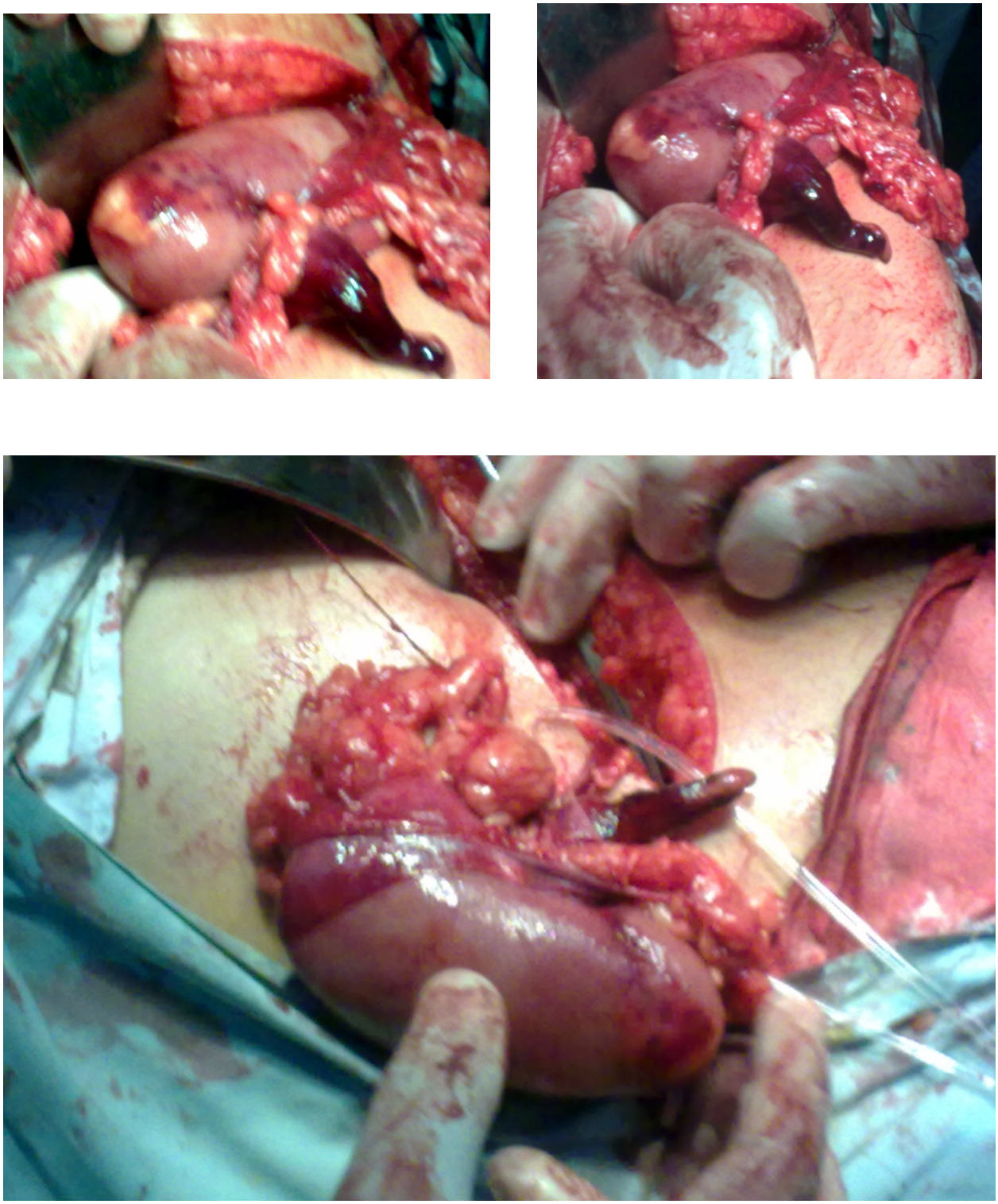


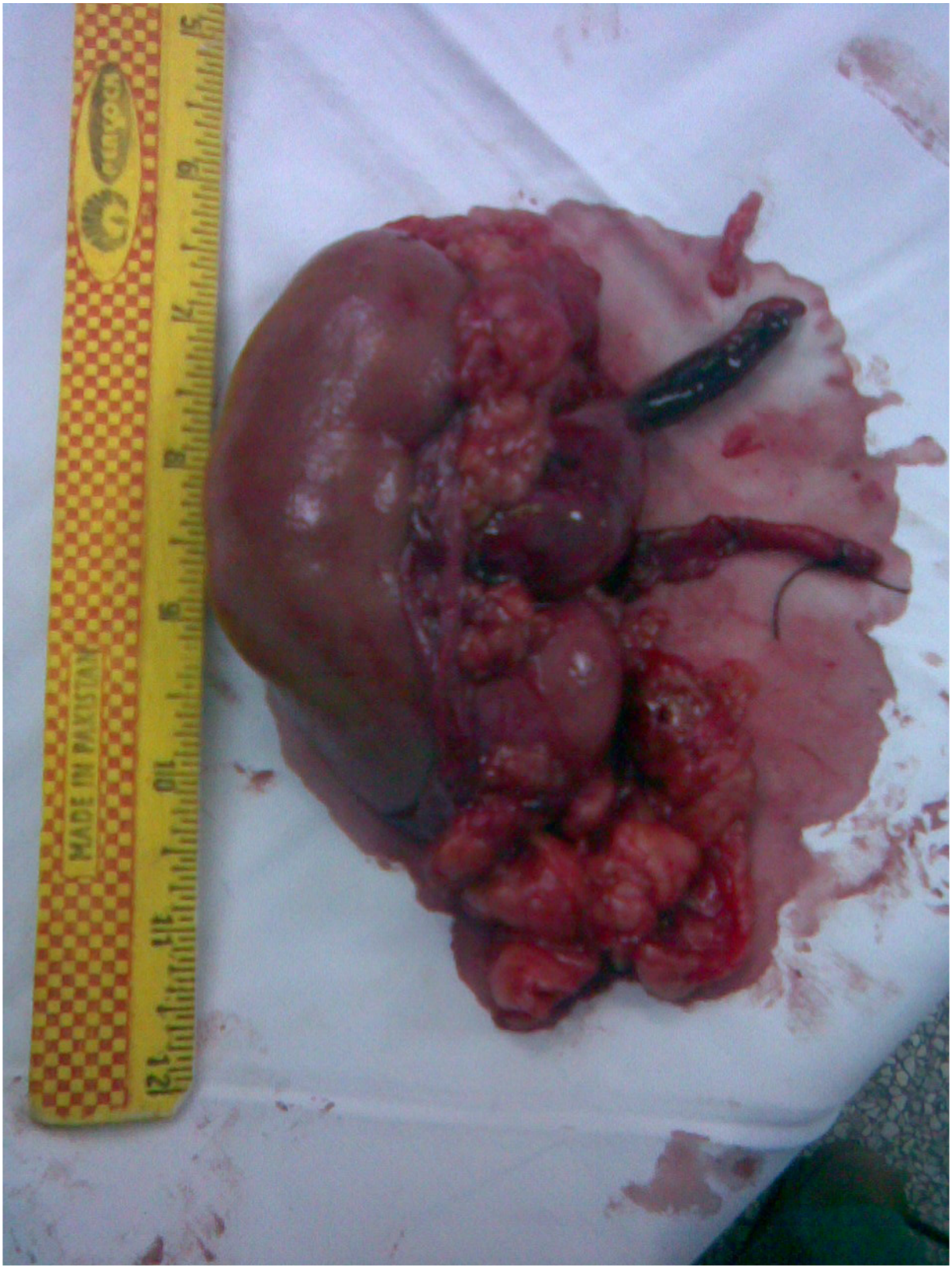
**1. Intravenous urograph of patient**




**2. Computerized tomography showing cyst**



**3. Per operative pelvic cyst of kidney**




**4. Kidney with cyst (After nephrectomy)**