

A RARE CASE OF RENAL CELL CARCINOMA WITHOUT EVIDENCE OF PRIMARY TUMOUR IN KIDNEYS: A CASE REPORT

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ABSTRACT

Renal cell carcinoma, the most common type of renal malignant disease, accounts for 2 to 3% of all adult malignant neoplasms. The majority >50% of renal malignant neoplasms are now diagnosed incidentally by cross sectional imaging or ultrasound evaluation of other non specific complaints. Historically, renal cell carcinoma was diagnosed only at an advanced stage because of its location within its retroperitoneum. Despite this increase in asymptomatic diagnosis 30% of patients present with metastatic disease. With this case report of a 58 years male who presented with abdominal distension and shock. Later diagnosed post operatively as Renal cell carcinoma with normal kidneys based on immunohistochemistry studies.

KEYWORDS

Renal cell carcinoma, Retroperitoneal necrotic mass, Normal bilateral kidney, CD 10 –diffuse strong positive in tumour cells.

INTRODUCTION

Renal cell carcinoma arising from renal tubular cells these tumours typically arises in the proximal convoluted tubule or collecting duct within the renal parenchyma. It typically presents in 6th to 8th decade of life and is more common in men with risk factors being smoking, hypertension, obesity, acquired renal cystic disease, occupational exposure to aromatic hydrocarbons, asbestos, cadmium. Renal cell carcinoma is classified as clear cell carcinoma, collecting duct carcinoma, papillary renal cell carcinoma, chromophobe renal cell carcinoma and renal medullary carcinoma based on microscopic appearance and cell of origin. Outcomes of renal cell carcinoma tied to clinical stage at time of diagnosis. Renal cell carcinoma well known for its ability to metastasize to nearly every organ system of the body. The most common sites are lungs, bone, lymphnodes, adrenal glands, brain, liver and contralateral kidney.

CASE REPORT

We report a case of 58 years old male who came with history of abdominal distension for duration of 1 month and no other significant history related to urinary system and past surgical history. On examination patient was in respiratory distress and shock with inotropic supports with distended abdomen with no signs of peritonitis. Blood parameters were total leucocyte counts 10600, urea 118mg/dl, creatinine 2.5mg/dl. Plain x ray chest revealed –Air under diaphragm as in figure 1 and CT abdomen and pelvis-heterodense collection predominantly air pockets noted in right iliac fossa region extending upto right paravesical space of size 15 x 16cms which closely abutting right psoas muscle, kidney, liver, spleen, stomach and bowel loops were normal as in figure 2.



Figure 1 –Air Under Diaphragm

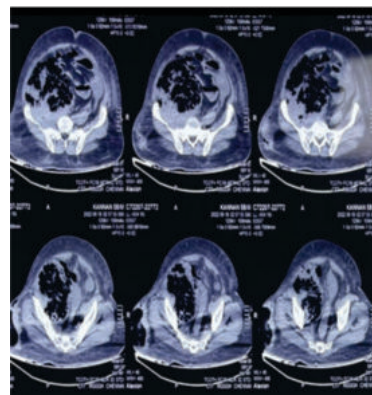


Figure 2-Heterodense Collections With Airpockets In Retroperitoneal Region

Management

Intra op findings were right iliac fossa region Necrosed retroperitoneal mass of size 15 x 12cms with purulent collection about 200ml was drained out, abscess cavity was opened-retroperitoneal mass [Figure 3] was sloughed out, friable and adherent to underlying structures. Retroperitoneal necrosed mass was partially removed [Figure 4] and sent for HPE. Stomach, duodenum, small and large bowel loops were normal. Liver, gall bladder, kidney and bladder were also normal. Right ureter [figure 5] could not be identified separately and found to be pushed medially by the retroperitoneal mass. Hence, proceeded with Right side upper ureterostomy and antegrade DJ stenting [figure 6] passed upto bladder and primary closure done



Figure 3- Retroperitoneal Mass



Figure 4- Cavity After Partial Removal Of Mass



Figure 5- Right Ureter



Figure 6- Dj Stenting

FINAL DIAGNOSIS

Metastatic Renal cell carcinoma in isolated retroperitoneal lymph node without evidence of primary tumour in kidney. Post op histopathological reported as tissues shows extensive areas of necrosis, haemorrhage with fragments of malignant neoplasm arranged in sheets interspersed by delicate thin walled blood vessels composed of round cells having clear cytoplasm, prominent hyperchromatic nuclei, some of the cells have abundant eosinophilic cytoplasm with peripherally pushed nuclei and some cells have spindled morphology and increased mitosis is seen. Immunohistochemistry markers studied were SYNAP-TOPOHYSIN –Negative, CHROMOGRANIN-Negative, PANCK-Negative, CD 10-Diffuse strong positive in tumour cells, MSA-Negative. Based on morphological and IHC features it was diagnosed as Renal cell carcinoma however variant of RCC could not be made out.

DISCUSSION

Retroperitoneal lymph node dissection plays a diagnostic, therapeutic and prognostic role in management of urologic malignancy. Metastatic RCC is typically classified as either synchronous [detected at the same time as primary tumour] or metachronous [detected after a time interval from primary tumour]. The discovery of peripheral lympho-venous communication in RCC has led to two varying mechanisms of RCC metastasis. 1. Hematogenous metastasis in RCC originates from lympho-venous anastomoses between the primary tumour and sentinel lymph nodes. 2. RCC initially spreads hematogenously with lymph node involvement occurring later. In our case the patient has no evidence of renal tumour by radiological and intraoperative findings. After detailed study of tissue with IHC markers positivity for renal cell carcinoma with CD10 strongly positive which made us to conclude this case as renal cell carcinoma without primary in kidney. This can be possibly due to spontaneous regression of RCC as per studies in Janiszewska et al. Hence, the unusual presentation of RCC without a primary tumour in the kidney signifies the importance of potential curative role for metastasectomy without a need for nephrectomy and requires long-term surveillance imaging studies to detect potential recurrent disease.

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