



## Transitional Cell Carcinoma of Renal Pelvis and Ureter presenting as Huge Abdominal Lump: A rare clinical presentation

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### ABSTRACT

*A 60 year old man presented with a huge lump in abdomen for last 7 months without any urinary tract symptoms. C.T. scan abdomen revealed left gross hydroureteronephrosis. Nephroureterectomy was done. Cuff of bladder was also removed. specimen was subjected for histopathology which confirmed findings of TCC in renal pelvis and whole ureter.*

**Keywords :** Transitional Cell Carcinoma( TCC), Renal Pelvis, Ureter.

### Introduction

The urothelium is the mucosal lining of renal collecting system. (Calyces, infundibula and renal pelvis), ureters, Urinary bladder and portions of urethra [1] and it is a target tissue for carcinogens that leads to the development of Transitional cell carcinomas [2]. Malignant tumors arising from the renal pelvis constitute only 5% of urinary tract neoplasms; approximately 90% of pelviccaliceal cancers are transitional cell carcinoma (TCC), and the remaining 10% are squamous cell carcinoma [2]. Their clinical presentation is nonspecific and variable, and they can be mistaken for a variety of conditions. Sometimes they are detected in unsuspected cases with urinary tract symptoms. This report is an unusual case in which TCC of renal pelvis and ureter present as only a huge lump in the abdomen without any urinary tract symptoms.

### Case report

A 60-year-old man presented with a huge lump in left hypochondrium, left lumbar, left iliac fossa region extending to umbilical and hypogastric region crossing the midline for last 7 months (fig.1). He had a past history of open ureterolithotomy of lower ureter 25 years back. There is no history of Haematuria, dysuria, flank pain. He had been a chronic smoker for last 20 years. Blood investigations are within normal limits. His urinalysis showed traces of protein. C.T.scan abdomen revealed gross left hydroureteronephrosis with markedly thinned out renal parenchyma and multiple enhancing plaque like lesions arising from the wall of dilated left ureter protruding into the lumen. Intra-operatively left kidney was hugely dilated with dilated renal pelvis and ureter. Marked fibrosis was present at the uretero-vesical junction. Nephroureterectomy was done. Cuff of bladder was also removed. Size of the kidney is 21 x 17 x 11 cm. and that of ureter is 33 x 3 cm. Histopathology revealed papillary urothelial transitional cell carcinoma of renal pelvis with involvement of ureter in its whole course with chronic pyelonephritic changes (fig.2).

### Discussion

Urothelial tumors originate much more often (30-50times) in the bladder than renal pelvis where as pelvic tumors are two to three times more common than ureteral ones. Tumors of urothelium are far less common than RCC by a ratio of 9:1. The peak occurrence is in 6th or 7th decades with predominance in men in a ratio of 3:1or4:1 [1].

similar to that reported for TCC of the bladder [3]. Heavy cigarette smoking and chronic use of laxatives or non-steroidal anti-inflammatory drugs such as phenacetin are reported to be closely associated with this cancer [4,5]. Occupational exposure to organic chemicals has been associated with a higher risk of developing upper urinary tract urothelial cancers in workers in the chemical, petrochemical or plastics industries [5].

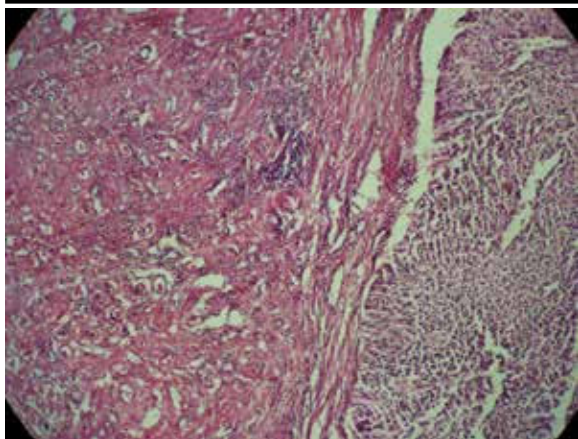
TCC of kidney may arise from any portion of the renal pelvis but the extrarenal pelvis is most frequently affected. These tumors are centrally located in the renal pelvis and secondarily invade the renal sinus fat and renal parenchyma [6]. Usually, TCC presents as macroscopic or microscopic haematuria in 75–90% of patients. Flank pain, occurring in 20–40% of patients secondary to an obstructive tumour mass, may mimic a ureteral calculus. Urinary symptoms (dysuria, pollakiuria, etc) may occur in 25–50% of patients. Physical examination is generally normal, with the exception of a palpable flank mass in fewer than 10% of patients [7].

The treatment of renal pelvis and ureter tumours is open or endoscopic/laparoscopic surgery varying from conservative to more extensive surgical procedures, i.e. radical nephroureterectomy including the removal of the contents of Gerota's fascia with ipsilateral ureter and a cuff of bladder at its distal extent [8]. The entire ipsilateral ureter should be removed as 20–50% of patients with residual ureteral stumps develop tumours within the stump [9,10].



**Fig.1 Abdominal lump crossing midline**

The etiology of primary TCC of the renal pelvis or ureter is



**Fig.2 Histopathology of the specimen.**

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