AIMS: To present the rare case of transitional cell carcinoma of the renal pelvis in the region of endemic nephropathy.

PATIENT REPORT: A 64-year-old man with gigantic urothelial carcinoma in renal pelvis and ureter. Patient underwent right nephrectomy. Hystopathological analysis after right nephrectomy revealed urothelial transitional cell carcinoma, grade III-IV with infiltration of right ureter. After one month, because of the hystopathological findings, patient underwent ureterectomy on the right side.

RESULTS: Two years after surgery there are no signs of primary disease or metastasis and the cystoscopy findings are normal.

CONCLUSION: Despite the poor prognosis, two years after surgery patient is without signs of primary disease or metastasis.

Key words: cell carcinoma, renal, pelvic, endemic nephropathy

INTRODUCTION

Urothelial carcinoma of the upper urinary tract represents only 5% of all urothelial cancers. Upper urinary tract TCC is estimated to occur in 5% of all urothelial cancers and in less than 10% of renal tumors. Evidence indicates that the frequency of upper urinary tract malignancies is increasing.

The two major causes of urothelial cancer, cigarette smoking, and occupational exposure to arylamines, have been recognized for 4 decades. Other environmental risk factors unique to the upper urothelial tract, such as analgesic nephropathy and Balkan nephropathy have been identified.

Worldwide statistics vary and are inaccurate, since renal pelvis tumors are not reported separately. The highest incidence is found in Balkan countries (eg, Bosnia, Bulgaria, Croatia, Romania, Serbia), where UCs account for 40% of all renal cancers and are bilateral in 10% of cases. The 5-year cancer-specific survival in the United States is roughly 75% with grade and stage being the most powerful predictors of survival. Men are affected approximately 2 times as frequently as women. Renal pelvis tumors rarely occur before the age of 40 years. The peak incidence is in the 60- to 70-year age group. Nephroureterectomy with excision of the ipsilateral ureteral orifice and bladder cuff en bloc remains the gold standard treatment of the upper urinary tract urothelial cancers. Due to the high rate of ureteral stump recurrence, which has been reported to be between 30% and 75%, it is important to complete the nephroureterectomy with a cuff of urinary bladder.

We report a rare case of gigantic urothelial carcinoma of the renal pelvis and ureter in the region of endemic nephropathy.

CASE REPORT

We report a case of a 64-year-old man with gigantic urothelial carcinoma in renal pelvis and ureter. Patient was admitted to the hospital with the symptoms of flank pain and the tumorous mass in the right side of the abdomen. Gross hematuria and elevated body temperature were present. Creatinine and blood urea levels were normal. On the clinical examination patient had evident tumorous mass in the right side of the abdomen. (Figure 1).

Ultrasonography and computerized tomography showed cystic tumorous formation on the right side in the retroperitoneum with exclusion on the CT urography. Contra lateral kidney was within normal findings. (Figure 2).

Patient underwent right nephrectomy. Surgical specimen had weight of 4.3 kg, dimensions were 29x24x15 cm. (Figure 3).
Hystopathological analysis after right nephrectomy revealed urothelial transitional cell carcinoma, grade III-IV with infiltration of right ureter. After one month, because of the hystopathological findings, patient underwent ureterectomy on the right side.

Two after surgery there are no signs of primary disease or metastasis and the cystoscopy findings are normal. Blood levels of urea and creatinin are within normal range.

**DISCUSSION**

There have been rare reports in the literature describing this extensive TCC of the renal pelvis and ureter. It is well known that tumor grade and stage in urothelial cancers of the upper urinary tract are powerful predictors of patient outcome. This is a rare case of gigantic high grade transitional cell carcinoma of renal pelvis and ureter with responded well to the surgical treatment. Despite the poor prognosis, two years after surgery patient is without signs of primary disease or metastasis. Kidney function is within normal parameters.

**SUMMARY**

**GIGANTSKI TUMOR PRELAZNOG EPITELA PIJELONA U REGIJI ENDEMSKE NEFROPATIJE**

CILJ RADA je da prikaže redak slučaj carcinoma prelaznog epitela pijelona u oblasti endemske nefropatije.

PRIKAZ PACIJENTA: Muškarac star 64 godine sa carcinomom pijelona i uretera tipa prelaznog epitela. Pacijentu je učinjena desna radikalna nefrektomija. Histopatološka analiza je utvrdila da se radi o karzinomu prelaznog epitela gradusa III-IV sa prisutnom infiltracijom desnog uretera.

Zbog rezultata histopatološke analize mesec dana nakon inicijalne hirurške intervencije, pacijentu je učinjena desnena nefroureterektomija.

REZULTAT: Dve godine nakon operacije nije bilo znakova primarnog oboljenja ili metastaza a cistoskopski nalaz je takodje bio uredan.

Ključne reči: karcinom, pijelon, endemska nefropatija

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