

**Papillary Transitional Cell Carcinoma of the Bladder in an 11 Years Old Boy
Onbir Yaşındaki Çocukta Mesanenin Papiller Transizyonel Hücreli Karsinomu**

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Özet

Mesane kanseri erkeklerde en sık görülen 4. kanser olup erkekleri kadınlardan 3 kat daha fazla etkilemektedir. Transizyonel karsinom olarak bilinen ürotelyal karsinom tüm mesane kanseri tipleri içerisinde en sık görüleni olup %90'ın üzerinde bir orana sahiptir. Mesane kanserinin görülme sıklığı yaşla artmaktadır ve olguların %90'ını 55 yaş üzeri olgular oluşturmaktadır. Transizyonel hücreli kanser çocukluk döneminde oldukça nadir olarak görülmektedir. Onbir yaşındaki erkeğe çocuk ağrısız hematüri yainması ile kliniğimize başvurdu. Abdominal ultrasonografi mesane posterolateral duvarda yaklaşık 3x2 cm boyutlarında tümör olduğunu gösterdi. Komplet transüretal tümör rezeksiyonu yapıldı. Histopatolojik olarak tümörün lamina propria invazyonu olan düşük dereceli papiller transizyonel hücreli karsinom olduğu anlaşıldı. Kontrol sistoskopide tümör nüksünün olmadığı görüldü.

Anahtar kelimeler: Mesane, tümör, çocuk, tedavi

Abstract

Bladder cancer is the fourth most common cause of cancer in males and affects men three times more frequently than women. Urothelial carcinoma, also known as transitional cell carcinoma, is the most common pathologic subtype of bladder cancer and is seen in over 90% of all tumors. Its incidence also increases with age, with 90% of cases occurring in individuals over 55-years-old. Transitional cell carcinoma of the bladder is a rare entity in childhood. A 11-year-old child having the symptoms of painless gross hematuria was admitted to our clinic. Abdominal ultrasonography revealed a tumor located on the left posterolateral wall measuring 3x2 cm. Complete transurethral resection of the lesion was performed. Histopathologically, resected tumor was low grade papillary transitional cell carcinoma with lamina propria invasion. Control cystoscopy showed no evidence of recurrence.

Key Words: Bladder, cancer, child, treatment

Introduction

Primary epithelial tumor of bladder is very rare situation in childhood. Fewer than 150 cases of pediatric TCC of the bladder have been reported. In a study of 10000 cases of bladder epithelial tumors, Javadpour and Mostofi (1) found only 3 cases under fifteen years old. A large serie has decribed the characteristics of these tumors as low grade and low recurrence rate (2). We present a case of a 11-year-old boy with TCC of bladder.

Case Report

An eleven-year-old boy complained of painless gross hematuria 3 months duration. There was no history of trauma, exposure to carciogenic agents and second-hand cigarette smoke, urinary tract infection, bleeding tendecy His family history was also negative for bladder cancer. Past medical history was unremarkable. Urinalysis revealed hematuria and pyuria. Physical examination was unremarkable. The cystogram phase of excretory urogram was normal. Abdominal ultrasonography showed an endovesical papillary lesion of 23x19 mm located on left posterolateral wall. Cystoscopy under anesthesia revealed a papillar 3x2 cm lesion adjacent to the left ureteral orifice and transurethral resection was performed. A single dose of 30 mg epirubicin was instilled within 2 hours after resection. Histopatologically, resected tumor was low grade papillary transtional cell carcinoma with lamina propria invasion (Figure 1-4). One month after first resection we performed repeat-TUR operation. No new tumor was revealed.

Figure 1: Papillary configuration of tumor. Hematoxylin-eosin stain.(HEx100).

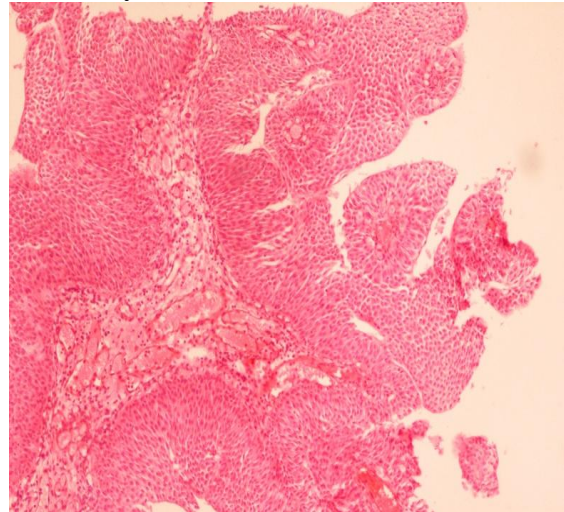


Figure 2: Crowding of epithelial cell. (HEx200).

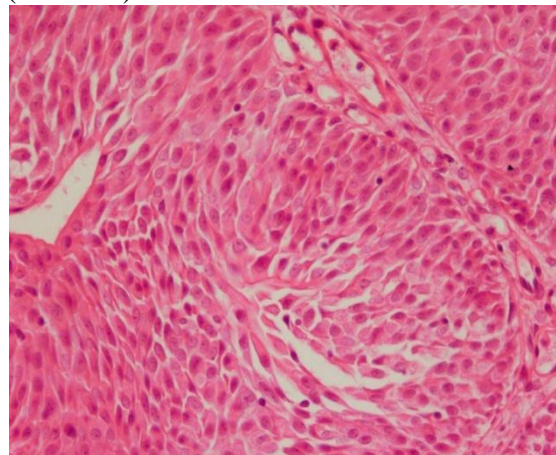


Figure 3: KI-67 immunostaining (%1-2) (KI-67x200)

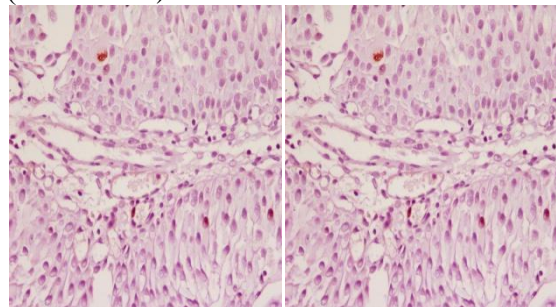
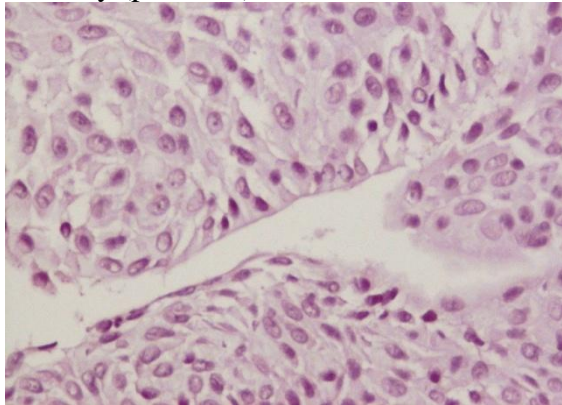


Figure 4: Negative immunostaining of p53 antibody (p53x400)



Discussion

Primary bladder epithelial tumors are uncommon in childhood and usually mesodermal origin (2). As in adults, there is a male dominance and exposure to cigarettes may be associated with increased risk (3). A review of the literature with 25 patients under 10 years old with TCC of bladder revealed that only %3 of them had lamina propria invasion and the recurrence rates were very low (%2 to %5) (4). Recurrence, invasion and death are rare but reported (5). Because of low recurrence rates and lack of invasion, ultrasound was thought an appropriate follow-up procedure for children with TCC of bladder. However Paduano, and Chiella reported 3 cases of which 2 had recurrence. Recurrence of these tumors noted only at cystoscopy (6). Cases of recurrence have been reported in children at 2 months to 5 years after treatment (6). Although majority of cases in children have low recurrence rate, we recommend follow-up of these patients must continue for 5 years because the outside range for recurrences has been reported as 5 years. Routine cystoscopic follow-up at 3-month intervals for first

year must be preferred follow-up method instead of abdominal ultrasonography.

Linn et al. studied the records of 73 patients with bladder tumor under 30 years old and reported immunohistochemical evidence of p53 gene product overexpression in the majority of cases, regardless of stage (7). In our study none of tumor cells showed nuclear immunostaining with p 53 body. Additionally, tumor had a Ki-67 index of 1-2%. Studies investigating the relationship between p53 immunostaining and recurrence have given conflicting results for superficial bladder cancer. Ikegami et al suggested that the immunohistochemical study of p53 overexpression is a useful predictor for tumor recurrence and prognosis in patients with superficial bladder tumor with grade 3 (8). As a contrary study with 58 cases the expression of p53 does not seem to offer any prognostic information in predicting either recurrence or progression over the prognostic factors that are currently used in clinical practice (9). In the same study Stavropoulos et al reported that Ki-67 proliferative index has an independent validity in predicting those patients with high risk superficial bladder tumors who may recur in a short follow-up period. A similar relationship of Ki-67 overexpression to progression was not detected. As a summary, clinical significance of p53 and Ki-67 immunochemical staining remains a topic of debate. TCC of the bladder in childhood is a relatively benign lesion, and aggressive treatment is seldom needed. Additionally recurrence has been reported in children, these patients should be carefully followed up at least five years and 3-month intervals should be performed for the first year using

both cystoscopic and ultrasonography examination.

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