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Transitional Cell Carcinoma of the Bladder in a Young Adult

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Key Words

Bladder cancer
Young adult

Abstract

A rare case of bladder cancer in an 18-year-old male is presented and the clinical features and management discussed.

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Introduction

Cancer of the bladder is uncommon in the first 2 decades of life, and there have been about 100 reported cases since 1950 of patients below 21 years of age with transitional cell carcinoma of the bladder [Benson et al., 1983].

Lately it has been felt that the biological behavior of tumors in this age group is similar to that in adults, and every effort should be made to diagnose and stage the tumors accurately.

Fig. 1. Excretory urogram showing an intravesical filling defect in the right lateral wall.

Case Report

An 18-year-old male first presented to our service in 1981 with gross painless hematuria of 1 day duration. There was no history of infection, calculi, or trauma. He had had a similar episode of hematuria 6 months prior to this event, and it had been attributed to urinary infection and was treated with antibiotics.

His routine laboratory investigations were normal except for a urinalysis which showed 40–50 red blood cells/high-power field. The urine cytology was negative. The excretory urogram revealed normal upper tracts with an intravesical filling defect in the right lateral wall (fig. 1). On cystoscopy a papillary tumor 1 cm in diameter was seen just above the right ureteral orifice, and this was resected completely. The histology revealed a well-differentiated papillary transitional cell carcinoma grade 1–2. The patient has had repeat recheck cystoscopies at 6-month intervals, and they have all been negative to date (3 years postoperatively).

Discussion

Transitional cell carcinoma of the bladder is rare in the first 2 decades of life, and hematuria in this age group is initially attributed to some other cause, such as infection as in this case. However, in over 90% of these patients, hematuria is the initial symptom, and, despite its unusual occurrence, one must consider epithelial bladder tumors in the differential diagnosis [Javadpour and Mostofi, 1969]. Urine cytology is often not helpful, as these tumors tend to be low-grade, and an intravenous pyelogram may be normal, although occasionally an intravesical filling defect is seen (fig. 1). Cystoscopy is diag-

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nostic in these patients, and in most instances these tumors are solitary.

Epithelial bladder carcinoma in the first 2 decades of life is seen predominantly in men, and several environmental factors have been implicated as being potentially carcinogenic [Benton and Henderson, 1973]

The tumor characteristically presents as a solid solitary papillary lesion above the ureteral orifice on the lateral walls. The tumors are usually low-grade with the recurrence rate being between 2.6 and 5% [McCarthy et al., 1979]. The treatment should be governed by the grade and stage of tumor rather than by the age of the patient; but the rarity of deep infiltrating and high-grade lesions virtually eliminates cystectomies in these patients.

Since these tumors are usually low-grade, noninvasive, and rarely recurrent, a proper history of hematuria, urinalysis, cytology, excretory urograms with occasional cystoscopy, if indicated, constitute adequate follow-up for these patients.

References

- Benson, R.C.; Tomera, K.M.; Kelalis, P.O.: Transitional cell carcinoma of the bladder in children and adolescents. *J. Urol.* 130: 54 (1983).
- Benton, B.; Henderson, B.E.: Environmental exposure and bladder cancer in young males. *J. natn. Cancer Inst.* 51: 269 (1973).
- Javadpour, N.; Mostofi, F.K.: Primary epithelial tumors of the bladder in the first two decades of life. *J. Urol.* 101: 706 (1969).
- McCarthy, J.P.; Gavrell, G.J.; LeBlanc, G.A.: Transitional cell carcinoma of bladder in patients under thirty years of age. *Urology* 13: 487(1979).