Prostatic Adenocarcinoma Coexist with Transitional Cell Carcinoma of the Bladder and Prostate – A Case Report and Review of the Literature

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ABSTRACT

Prostatic adenocarcinoma(PAC) with transitional cell carcinoma(TCC) of the bladder and prostate is a rare clinicopathological entity, presentation is usually late. We report a case with obstructive voiding symptoms and lumbago. Prostatic and cystic biopsy revealed PAC and TCC of bladder. Bone scan showed multiple bone metastases. He underwent transurethral resection of the prostate and bladder tumor and was found to have PAC with TCC of the bladder and prostate. We discuss the cases of PAC with TCC of the bladder and prostate.

KEYWORDS: adenocarcinoma, transitional cell carcinoma, prostate, bladder.

INTRODUCTION

Prostatic adenocarcinoma(PAC) is a common cancer in aged man, but PAC with transitional cell carcinoma (TCC) is a rare clinicopathological entity, especially in China. Now we present a case of PAC with TCC of bladder and prostate.

CASE REPORT

A 58-year-old man complained of a 3-month history of obstructive voiding symptoms and lumbago, he denied macroscopic hematuria. Examination showed that the prostate was enlarged and stony hard. Serum prostate specific antigen (PSA) was 37.2 ng/ml. Computed tomography (CT) demonstrated marked thickenting of bladder neck and abnormal density in the prostate. Prostatic and cystic biopsy revealed PAC and TCC of bladder. Radioisotope bone scan showed multiple bone metastases. Then transurethral resection of the prostate and bladder tumor was performed. Histopathological examination revealed PAC with TCC of prostatic urethra, Gleason score 8, and high-grade TCC of bladder. After operation the patient received hormonal therapy. One month later, he was free of any obstructive voiding symptoms and the symptom of lumbago was catabatic too, serum PSA dropped to 0.13ng/ml. Now the patient has suvived for 2 months.

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DISCUSSION

PAC and TCC of the prostate are common types of carcinoma involving the periurethral glands and ducts of the prostate. TCC of the prostate is believed to arise as a primary lesion in prostatic ducts or acini, or in association with a bladder tumor. The primary form is rare, reported to account for 2 to 4% of all prostate cancer.[1,2] while secondary involvement of the prostate is common, the incidence of TCC involving the prostate in patients with bladder cancer range from 12 to 45%. [3,4] The case we reported belonged to the secondary form. Several investigators found no correlation between the stage of bladder cancer and the extent of prostatic involvement, but the patients with carcinoma in situ of the bladder neck or trigone showed higher incidence of prostatic involvement. [5] Adenocarcinoma and TCC may coexist in the prostate. Cheville et al identified 4 of 50 patients (8%) with TCC of the prostate coexisted with PAC. [6] Johnson et al found that 3 of 9 patients (33%) with TCC of the prostate also had PAC. [7] But the exact prevalence is still not known, it has not been reported in China. Based on the stage of tumors and general condition of the patients, the patients with PAC and TCC of bladder can be treated with radical prostate transurethral resection. cystoprostatectomy, radiotherapy and hormonal therapy. However, in comparison with the outcome of the patients only having PAC or TCC, PAC with TCC was associated with a worse prognosis. Mai et al reported six cases of PAC with TCC all died within 3 years. [8] This result was probably due to most cases of PAC with TCC in a late stage of evolution of the disease, distant metastases especially bone metastasis are common. [8] Therefore, an early identification of PAC with TCC is very important. Many urologist have recommended serum PSA assessment, needle biopsy of the prostate and transurethral biopsy of the prostate and bladder as the optimal techniques. [5] In conclusion, PAC with TCC of the prostate and bladder is a rare disease, its biological behavior is still unclear, so further investigations are necessary.

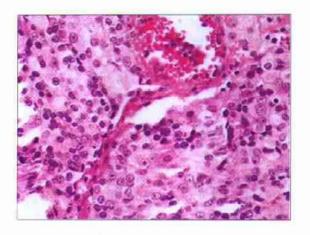


Fig.1. PAC and TCC of the prostate HE × 200.

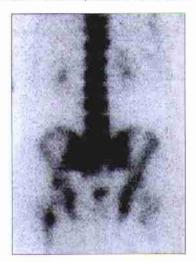


Fig.2. Radioisotope bone scan show multiple bone metastases.

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