

·Letters to the Editor·

## Undescended epididymo-testicular metastasis from prostatic carcinoma

Li-Ping Xie, Jie Qin, Xiang-Yi Zheng, Zhao-Dian Chen

*Department of Urology, First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou 310003, China*

Correspondence to: Dr Li-Ping Xie, Department of Urology, First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou 310003, China

*Tel: +86-571-8723-6626, Fax: +86-571-8723-6677; E-mail: xielp@zjuem.zju.edu.cn*

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Dear Sir,

Metastasis of prostatic carcinoma to testis is uncommon in the clinical situation, and the involvement of the epididymis is even rarer. Heidrich *et al.* [1] found only 80 cases of testicular involvement in prostate cancer in published reports. In 1993, Wiebe *et al.* [2] found only 14 previous cases of epididymal metastasis from prostatic carcinoma in published work. The simultaneous involvement of testis and epididymis was reported by Suhler and Blanchard in 1980 [3]. To our knowledge, this was the first documented case of a prostatic carcinoma metastasizing to undescended testis and epididymis.

An 84-year-old patient was admitted for further investigation with a chief complaint of irritative bladder symptoms including dysuria and pollakisuria for several years. The patient was in a generally healthy condition, the right testis was normal. The left testis was undescended and located in the superficial inguinal pouch on physical examination. Digital rectal examination disclosed the enlargement of prostate, with a nodular surface and a consistency of hardness. Serum prostate-specific antigen (PSA) was elevated with total PSA and free PSA of 52.3 ng/mL and 6.45 ng/mL, respectively. An emission computed tomography bone scan reported the metastasis of prostatic carcinoma in the right middle femur. Prostatic biopsy revealed adenocarcinoma in all fragments (Gleason score 7 to 8). Therefore, the patient received a bilateral orchiectomy for hormonal management of meta-

static prostate carcinoma. Pathologic examination of testicular tissues was carried out postoperatively, and the metastasis of prostatic adenocarcinoma to the left undescended testis and epididymis was found (Figure 1), as evidenced by positive staining of PSA and prostatic acid phosphatase with a Gleason score of 5. Maximal androgen blocked with bicalutamide (Casodex, 50 mg/d) was initiated after surgery. After surgery and total androgen ablation, total PSA dropped to 7.6 ng/mL within 2 months. In light of good drug response, Casodex therapy was continued. The patient is followed up regularly, and remains in good condition 3 years after surgery.

Since 1998, 481 patients diagnosed with prostatic carcinoma have been treated in our department, two of whom had testicular metastases when examined by immunohistochemical phenotyping after therapeutic bilateral orchiectomy. Metastatic carcinomas of the prostate to the testis were asymptomatic in most instances. Metastasis of prostate adenocarcinoma to testis was detected incidentally after bilateral orchiectomy for hormonal management of metastatic prostate carcinoma. Microscopy revealed an adenocarcinoma which, given the history of the patient and a positive immunohistochemical stain for PSA, was identified as metastatic prostatic adenocarcinoma [4].

The prognostic significance of testicular localization is still unknown. Metastatic carcinoma of the prostate to the testis is commonly accepted as a sign of advanced disease and it is usually accompanied by multiple me-

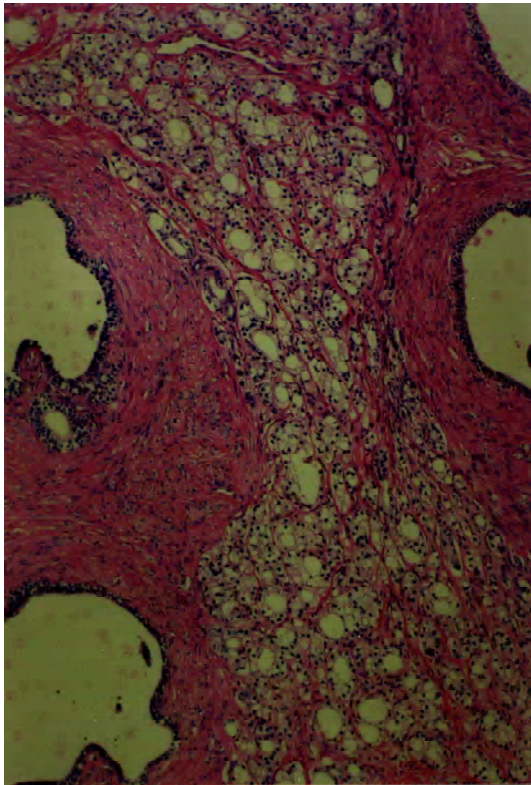


Figure 1. Prostatic adenocarcinoma infiltrating undescended epididymis. Prostatic adenocarcinoma which formed acinus-like structures infiltrated into the interstitium surrounding epididymal ducts. Hematoxylin–eosin stain,  $\times 100$ .

tastases to other organs. Patients with prostate carcinoma and testicular or penile metastases have unique clinical and pathologic characteristics. Many of these patients' tumors are compatible with a subtype of prostate carcinoma known as ductal adenocarcinoma. These patients tend to develop intractable local symptoms and predominant visceral metastases [5]. In terms of the frequency of cryptorchidism, the metastasis of prostate cancer to undescended testis is rarely seen. Although uncommon, undescended epididymo-testicular metastasis should be considered in patients with known prostatic carcinoma and cryptorchidism.

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