Coexistence of Bladder Prostatic-Type Polyp and Urothelial Papilloma

To the Editors:

The first finding of bladder prostatic type polyp (PTP) was reported in 1894 by Jores. The lesion was located under the mucosa of the upper urethra and in the bladder neck. Benign PTPs have been described in adult male urethra, trigone, interureteral ridge and urethral orifice as yet. Most PTPs of the bladder have interspersed islands or complete covering of transitional epithelium on the surface. Coexistence of bladder PTP and urothelial papilloma (UP) has not been reported until now.

A 55-year-old man was admitted to the urologic department because of a recent episode of hematuria. A single 0.8-cm bladder tumor arising from the left lateral wall was found at cystoscopy. A transurethral resection was performed. Histologic examination of the removed lesion showed 2 distinct proliferative patterns (Figure 1). Exophytic UP was composed of a delicate fibrovascular core covered by urothelial cells indistinguishable from that of normal urothelium. PTP consisted of acini and papillae lined by prostatic-type epithelium. Immunohistochemical staining for prostate specific antigen and prostate specific acid phosphatase were positive.

The histologic specimen was sent to Dr. Jonathan I. Epstein, Department of Pathology, The Johns Hopkins Hospital, Baltimore, Maryland, U.S.A., who confirmed the diagnosis of PTP and benign urothelial papilloma. The postoperative course was uneventful. A cystoscopy performed 3 months after removal of the lesion showed no evidence of recurrence.

In the opinion of Chan et al., the histogenesis of PTP may differ depending on the different sites of the lower urinary tract. Most PTPs of the bladder, mainly in the trigone and bladder neck, may be an unusual variant of cystitis cystica and cystitis glandularis, reflecting the wide proliferative and metaplastic potentials of urothelium. The supratrigonal area is a very unusual site of PTP and the origin of prostate gland in this unlikely location is not yet fully understood.

The hypothesis of urothelial metaplastic mechanism is supported by immunohistochemical demonstration of prostatic acid phosphatase and prostatic specific antigen in urothelial cells adjacent to prostatic type epithelial cells.

PTPs of the ureteric orifice and interureteral ridge may be an unusual variant of cystitis cystica and cystitis glandularis. In these sites the metaplastic potential of urothelium may not appear implied in the origin of the disease. The histogenesis of the lesion is probably a developmental abnormality. The urethral PTPs probably represent a hyperplastic lesion because the prostatic urethra is normally partially lined by prostatic-type epithelium.

The present case represents an example of true ectopic prostate tissue occurring in an area where prostatic elements are not found during embryogenesis. The recent World Health Organization (WHO) Classification of Urinary System Tumours 2004 has reported diagnostic criteria for UP. The incidence of recurrences and progression in patients with UP is uncertain. Numerous studies document that incidence is low, usually 1–4% of bladder tumor materials reported according to the strict definition of WHO; patients with “de novo” UPs are younger than patients with papillary urothelial neoplasm of low malignant potential and usually have a benign course. UPs are histologically and probably biologically distinctive tumors and merit distinction from other, higher risk papillary neoplasms of the urinary bladder. The present case is the first report of coexistence of UP and PTP.

Figure 1  Histologic examination showing 2 distinct proliferative patterns: urothelial papilloma and bladder prostatic type polyp.
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