

Urethral Caruncle Causing Bilateral Bladder Diverticula: A Case Report

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An urethral caruncle is a benign vascular tumor usually originating from the rear lip of the external urethral meatus and is usually observed in postmenopausal women. It is not included within the list of causes of bladder overdistension in women. We present a case of a urethral caruncle as a rare cause of acute urinary obstruction in a 71-year-old woman. The 71-year-old woman had occasional bleeding from a mass in the urethral meatus for 3 years. A reddish mass, measuring 3 cm in diameter, was noted at the posterior lip of the urethral meatus. The mass was diagnosed to be a urethral caruncle and was removed. Microscopically, the squamous epithelium, which covered the urethral caruncle, was found to be keratinized, with the proliferation of atypical cells with swollen nuclei in the entire mucosal layer. The patient could urinate better after the indwelling urethral catheter was taken out.

Keywords: Urethral caruncle, bladder, diverticula

INTRODUCTION

Urethral caruncle (UC) is a sensitive vascular benign tumor localized on the posterior lip of the urethral meatus, and it was first described by Samuel Sharp in 1750 (1). It consists of chronic inflammatory cells, dilated vessels, and hyperplastic epithelium loosely surrounded with transitional and squamous epithelial cells (2). In addition, its etiology is still undetermined, with asymptomatic features; a small number of patients show symptoms such as dysuria, dyspareunia, hematuria, and sense of pressure in the perineal region (3). In this report, a case of UC causing infravesical obstruction and bladder diverticula in an elderly woman was presented.

CASE PRESENTATION

A 71-year-old woman was admitted to the urology clinic with hematuria and a feeling of a lump in her genital region for 3 years. She has been in the post-menopausal state for 20 years on pelvic examination, there was a 3x2-cm reddish, raspberry-like, bleeding that was protruding circumferentially from the urethra and suggesting the presence of UC at the external urethra (Figure 1). She also had lower urinary tract symptoms such as pollakiuria, nocturia, and sense of residual urine. Uroflowmetry determined that the pre-operative maximum peak flow rate (Q_{max}) was 6 mL/s. She had normal postoperative serum BUN (blood urea nitrogen) (26 mg/dL) and creatinine (0.6 mg/dL) levels. Cystoscopy was performed using a 22-F cystoscope under spinal anesthesia. Diffuse trabeculation and two symmetrical diverticula was observed at posterolateral site of both ureteral orifices. The caruncle was excised. The patient started to urinate easily after the caruncle excision with a Q_{max} of 21 mL/s. Histopathological examination of the urethral lesion reported as the presence of UC. Written informed consent was obtained to publish the data and pictures of the patient.

DISCUSSION

UC is the most common urethral lesion among middle-aged or elderly post-menopausal women, and it protruded through the external orifice as a raspberry-like soft mass (3). They are nodular and pedunculated lesions that can bleed easily with manipulation (4). However, most patients are asymptomatic; patients who had complaints of pain exaggerated by movement, urination and hematuria can be diagnosed easily with inspection and palpation (5).

However, the etiology is unclear; congestion of the urethra, rupture of cysts of Skene's ducts, chronic irritation of the urethral mucosa, and estrogen deficiency are generally suspected (5).

Topical estrogen treatment or electrocoagulation can be performed, but surgical excision is the most preferred method among urologists because of the malignancy risk (5).

UC is a very rare cause of urinary obstruction resulting bladder diverticula. Although there are conservative treatment strategies, big or persistent caruncles should undergo aggressive surgical treatment.

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FIGURE I. Intraoperative appearance of the lesion

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