Urethral caruncle in penile urethra in a young male

Rishikesh Arun Kore*, Rajiv Nilkanth Kore
Department of Urology, Warana Institute of Urosurgery, Kolhapur, Maharashtra, India
*E‑mail: hrishi.kore@gmail.com

ABSTRACT

Urethral caruncles are seen almost exclusively in women. When these lesions are diagnosed in a male patient, he is likely to undergo unnecessary radical treatment mistaking a urethral caruncle for a malignant urethral neoplasm. Hence, a proper histopathological diagnosis is mandatory before deciding the final treatment. We report a case of fleshy masses in the penile urethra of a young male patient. Simple excision was performed and the histopathology revealed a urethral caruncle of the angiomatous variety.

INTRODUCTION

Urethral caruncles are benign urethral lesions most commonly seen in the postmenopausal women and are extremely uncommon in males.[1] In both the females and males, they have been described in the meatal or the parameatal location.[1‑3] Here, we report a case of urethral caruncle in a young male located in the proximal penile urethra.

CASE REPORT

A 37‑year‑old married male presented to the urology out‑patient department of our institute with the complaints of profuse urethral bleeding of 15 days duration. There was no history of hematuria, dysuria, or pain. There were no associated lower urinary tract symptoms. There was no history of trauma, violent sexual intercourse, bleeding disorder, or antiplatelet/anticoagulant medicine intake.

Clinical examination revealed a normal penis with completely retractable preputial skin and a normal looking glans. External urethral meatus was normal without active bleeding. Scrotal and inguinal region examination was normal and the systemic examination was unremarkable. His hemogram, renal function tests, blood sugar, and the coagulation profile were within the normal limits. The urine analysis revealed a plenty of red blood cells but the urine culture was sterile.

Urethroscopy revealed two red, fleshy, polypoid, sessile growths in the anterior urethra [Figure 1]. One was on the dorsal urethral mucosa (at 12 o’clock position on urethroscopy) in the midpenile urethra. The second one was seen in the proximal penile urethra on the right dorsolateral wall (at 10 o’clock position on urethroscopy). Both the masses were excised piecemeal, one after the other, with the help of a cold cup bladder biopsy forceps, packed separately and sent for histopathological examination. There was minimal bleeding from the base of the masses which was fulgurated with electrocautery. Rest of the urethra and the urinary bladder were normal. A 16F indwelling Foley’s catheter was placed.

The histopathological examination revealed a urothelium lined tissue with fibrous tissue and plenty of congested blood vessels in the sub‑epithelial regions suggestive of a urethral caruncle of the angiomatous type [Figure 2].

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DISCUSSION

Urethral caruncles are the most common benign tumors of the female urethra. They are small, fleshy, raspberry-like, reddish, polypoidal outgrowths arising from the distal urethral mucosa and are most commonly located on the posterior lip of the urethra. These are seen almost exclusively in females with a preponderance in the postmenopausal women and are uncommon in men. Till date, only a few cases of urethral caruncle in males, located at or near the external urethral meatus, have been reported. Although the etiopathology is unclear, deficiency of estrogens and chronic irritation of the urethral mucosa have been suggested as the predisposing factors.

Most of the patients are asymptomatic and are diagnosed incidentally. Only a few present with symptoms such as pain, urethral bleeding or hematuria, or obstructive urinary symptoms. As these lesions mimic neoplastic masses, histopathological examination is necessary to differentiate them from the other benign urethral lesions such as diverticulum or periurethral abscess. Clinical examination reveals reddish, fleshy polypoidal growth arising from the urethral mucosa which may bleed on touch. It may be tender if there is associated ulceration or a superadded infection.

Microscopic features of a urethral caruncle include varying degrees of subepithelial inflammation, edema, vascularity, and fibrosis with epithelial hyperplasia. These features sometimes may mimic a neoplasm. Histologically, urethral caruncles are categorized into three subgroups (a) granulomatous: with predominant granulation tissue, (b) papillomatous: grossly lobulated with clefts or tree-like pattern and epithelial plaques or pseudocysts in a loose stroma, (c) angiomatous or telangiectatic: rich in stromal blood vessels and few islands of epithelium. The histopathological features in the present case were suggestive of the angiomatous type.

Although there is a lack of information on the conservative management of urethral caruncles, warm sitz bath, vaginal estrogen replacement, topical anti-inflammatory medications have been tried, however, surgical excisional biopsy remains the treatment of choice. An alternative method described is the ligation of the base of the caruncle, allowing it to slough off in a couple of weeks.

CONCLUSION

Although caruncles are benign urethral masses, their clinical features may mimic neoplastic lesions. Even though they are rare in males, this case illustrates the possibility that some of such lesions might be urethral caruncle, at least in a few of the patients. This case is also unique as the lesions were located in the midpenile urethra. A proper pathological confirmation is mandatory before embarking on the treatment and these lesions should not be subjected to radical treatment on the mere suspicion of being a neoplastic growth.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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