Rare Images of Urethral Hemangioma and its Management

Swarnendu Mandal, Prasant Nayak, Suvendu Purkait, Manoj Das, and Rajesh Mahalingam

Hemangioma of the genitor-urinary tract commonly involves the kidney and the bladder. Urethral hemangioma is rarely encountered with only case reports available in literature. Larger lesions involving almost the entire penile urethra in length and width, and requiring open excision and reconstruction, are even rarer. We report the case of a 23-year-old male presenting with recurrent, intermittent urethral bleeding with normal urination for 3 years. Evaluation revealed a urethral growth which was managed with excision and reconstruction using buccal mucosa. Histopathology revealed it to be cavernous hemangioma. Patient is doing well at follow-up.

Urethral hemangioma is the least common type of genitourinary hemangioma. Anterior-urethral hemangioma presents with intermittent urethral bleed and no hematuria while posterior urethral hemangioma presents with hematuria. Management depends on size; while smaller ones are excised transurethrally, larger ones need open excision. We present a case of giant anterior urethral hemangioma managed by open excision and reconstruction.

A 23-year-old man presented with urethral bleed. Evaluation with blood, urine tests, and ultrasonography were normal. Cystoscopy (Fig. 1A) showed a reddish polypoidal growth with telangiectasia from 6-o’clock to 12-o’clock region of the urethra. Circumcoronal degloving penile incision was given. Penile urethra was opened at 3-o’clock position as it was disease free. Growth of 6 × 2 cm was noticed (Fig. 1B,C). The lesion appeared smaller on cystoscopy due to compression by the pressure of irrigation but appeared larger on opening the urethra. It was excised from the surrounding normal urethral mucosa, deep to the spongiosum, to ensure complete excision and prevent recurrence. Urethral defect was reconstructed using buccal mucosa (Fig. 1D,E). Immunohistochemistry confirmed it to be hemangioma (Fig. 2).

Hemangiomas are challenging to diagnose due to their rarity and pose a reconstructive challenge due to their operative complexity.
Figure 1. (A) Endoscopic view showing the hemangioma, (B) and (C): hemangioma on opening of the urethra, (D): urethral bed after excision of hemangioma, (E): epithelization of bed by buccal mucosa. (Color version available online.)
References


Figure 2. (A and B) Low magnification histomorphology of resected specimen of urethral mass highlighting the periurethral glands (black arrow) and cystically dilated blood vessels dissecting through the urethral smooth muscle (hematoxylin and eosin) (20×; a) (100×; b); red arrow highlights the cautery margin. (C): Higher magnification of the dilated vascular spaces lined by single layer of endothelium (hematoxylin and eosin) (200×). (D): The vascular channels are positive for CD34 immunostain (200×). (Color version available online.)