# Case Report

## Urethral Large Hemangioma in a Prepubertal Female Patient – A Case Report

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#### **Abstract:**

**Background:** Hemangiomas rarely occur in the urethra, and most reported cases have involved in men and elderly women<sup>1,2,3,4</sup>. The clinical manifestations of urethral hemangiomas include lower urinary tract symptoms, dysuria, hematuria, perineal discomfort, and urethral discharge. There are only a few cases reported in the literature and exact incidence is still not known.<sup>1,2,3,4,5</sup> A few case reports and occasional series

have described posterior urethral hemangioma presenting as hematuria. We are reporting a rare case of a cavernous hemangioma of the anterior urethra in a prepubertal female who presented in the gynae OPD with bleeding per vagina.

**Key word:** Hemangioma, Female urethra, Prepubertal patient

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## Case report:

A 10-year-prepubartal female presented with bleeding per vagina and something coming out of the vagina in the gynae OPD. However, meticulous history of patients showed, bleeding is mostly intermittent and after micturition with poor urinary stream, nocturia up to 3 times at night and a sensation of incomplete emptying, fever and foul perineal odour. There was no history of abdominal pain. However, on examination a 3cm compressible reddish circumferential swelling with focal bleeding points were noted at the distal urethra. She was referred to urology ward. Then the patient underwent incisional biopsy and Urethral cavernous hemangioma was diagnosed after histopathology.



Fig 1: Urethral hemangioma

On histopathological examination, the sections showed urothelial lining with ulceration. The sub epithelium showed varying size thin walled dilated, congested vascular channels and mild chronic inflammatory infiltrate. A diagnosis of cavernous hemangioma was made. Other pelvic organs were normal. coagulation, and Hematological, biochemical parameters were within normal limit. On next schedule patient underwent urethrocystoscopy and excision of hemangioma. Patients outcome followed by operation was good.

#### **Discussion:**

Urethral hemangiomas are unusual benign vascular tumors, sparsely reported in the literature. The urinary tract is the uncommon site of hemangioma and described mostly in the kidney, bladder, and prostate. Urethral hemangiomas are extremely rare. Usually, the patients present in older age although it can be seen in any ages. Mostly urethral hemangioma has been reported in male patients and it is rare in females. They are usually congenital and develop from the embryonic rest of the unipotent angioblastic cells that fail to develop into normal blood vessels4. Common presentations are bloody urethral discharge and hematuria and prolapsed oedematous blood stained urethra. However, in females rarely the hemangioma may present as bleeding per vagina. Distal urethral hemangioma usually presents as bloody urethral discharge and on histopathology they are cavernous hemangiomas while proximal urethral hemangiomas the presentation is with hematuria<sup>3,4</sup>. The other differentials diagnosis include polyp, caruncle, wart, and rarely malignancy. Incisional biopsy was done to confirmed diagnosis prior to definitive intervention. Urethrocystoscopy is an excellent diagnostic method that supports in identification of the characteristic, fragility, size, location, and number of hemangiomas<sup>6,7</sup>. Urethrocystoscopy was done before the operation and revealed normal bladder mucosa and bladder neck. An erythematous, protruding mucosal lesion was found in the distal urethra. The management of female urethral hemangioma can be challenging due to the chance for urethral stricture. Despite benign nature, hemangioma may recur due to incomplete excision.

The mass was completely excised<sup>5</sup>. We placed 8 "stay" sutures in the protruding urethral mucosa to facilitate mobilization from the distal urethra. The transection zone was exposed as a fibrous groove surrounding the distal urethra. We meticulously incised the mucosa to avoid the muscular layer and prevent bleeding, and cautery was used for hemostasis. We carefully excised the protruding lesion held by the stay sutures. Finally, the residual mucosa was attached to the external

urethra with 3-0 chromic catgut interrupted sutures<sup>1,2</sup>. Urethral catheterization done at the end of the operation. Postoperative recovery and outcome were

good.



Fig 2: After operation at 7th POD

Conclusion: urethral hemangiomas in females can present as vaginal bleeding. Therefore, meticulous clinical examination is required to suspect this rare entity and planning the treatment strategy for satisfactory outcome.

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