

Inflammation and infection

Hemangioma of penile urethra - Treatment with intralesional triamcinolone

Afifa Masood^a, Ijaz Hussain^a, Ubaid ullah khan^b, Yasir Masood^a, Musab Umair^{b,*}, Omer Farooq Rehman^b^a Shifa International Hospital, Islamabad, Pakistan^b Armed Forces Institute of Urology, Rawalpindi, Pakistan

ARTICLE INFO

Keywords:

Hemangioma
Urethra
Triamcinolone

ABSTRACT

Hemangiomas are benign vascular lesion, most commonly seen in liver and skin whereas rarely found in genitourinary system. In genitourinary tract urethral hemangiomas are mostly found in males. A case of urethral hemangioma in 18 years old boy who presented with history of painless bleeding per urethra since age of 3 years. Cystoscopy revealed multiple sub centric lesions in anterior urethra distal to verumontenum. Patient was treated with cystoscopic fulguration using diathermy. He started bleeding again on 3rd postoperative day, so intralesional triamcinolone was given. On follow up at one and three months he was asymptomatic.

Introduction

Urethral hemangiomas are rare benign vascular tumors which on histology consist of thin walled vascular spaces lined by endothelial cells. They are most commonly found in liver and skin and rarely reported in prostate, bladder, ureter and perineum.¹ Urethral hemangiomas are exceedingly rare. They often look like an erythematous, inflamed mass in urethra. It has been suggested that they originate from unipotent angioblastic cells which fail to develop into normal blood vessels. The most common type is cavernous hemangioma. The cardinal symptom is hematuria, usually macroscopic or urethrorrhagia.¹ They are found more commonly in males.²

Treatment may be extremely challenging and ranges from transurethral approach to open reconstructive surgery.³ Herein we present a case of a young male who was treated with simple cystoscopic fulguration using diathermy, followed by intralesional triamcinolone injection.

Case presentation

An 18-year-old pale looking boy came to the urology department of our hospital with a chief complaint of painless bleeding per urethra since the age of 3 years. There were no associated lower urinary tract symptoms or bleeding diathesis. Bleeding was so severe, at times he needed blood transfusions. On examination he was a pale looking child. There were blood spots on pants. There was a tiny hamartomatous lesion on

the penile shaft. His coagulation profile was normal. His hemoglobin was 7.1. One unit of packed RBC was transfused before surgery. Cystoscopy was done twice in part but no findings were picked. Urine R/E revealed 8–10 RBCs, no WBC. CT scan abdomen and pelvis was essentially unremarkable. On the basis of a high index of suspicion of hemangioma, we started him on propranolol after excluding all risk factors. We took the patient to OR for cystoscopy. Cystoscopy was done twice, which showed multiple sub centimeter lesions in anterior urethra distal to verumontanum, it was of adequate capacity and no lesion was seen in the bladder [Fig. 1(a)]. After thorough clinical examination and investigations, cystoscopic fulguration using diathermy was done under general anesthesia. When the catheter was removed on 3rd post op day, he started bleeding again. Cystoscopy performed again, it showed multiple bleeding hemangiomas in anterior urethra [Fig. 1(b)]. Triamcinolone 40 mg/1 ml was delivered in 20 ml normal saline and 2 cc was injected in each hemangioma. Catheter was removed on 3rd post-op day. He was asymptomatic at follow up at one month. Cystoscopy was performed after one month which showed no signs of hemangioma [Fig. 1(c)].

Discussion

Urethral hemangiomas are extremely rare conditions and occur at any age group. Most of the cases are encountered in males and only a handful of case reports have been reported in females. The most common type of histopathological hemangioma is cavernous hemangioma.⁴

* Corresponding author. author: Dr Musab Umair Armed Forces Institute of Urology, Rawalpindi, Pakistan.

E-mail address: musabumair923@gmail.com (M. Umair).<https://doi.org/10.1016/j.eucr.2020.101494>

Received 20 September 2020; Received in revised form 6 November 2020; Accepted 10 November 2020

Available online 12 November 2020

2214-4420/© 2020 The Authors.

Published by Elsevier Inc.

This is an open access article under the CC BY-NC-ND license

<http://creativecommons.org/licenses/by-nc-nd/4.0/>.

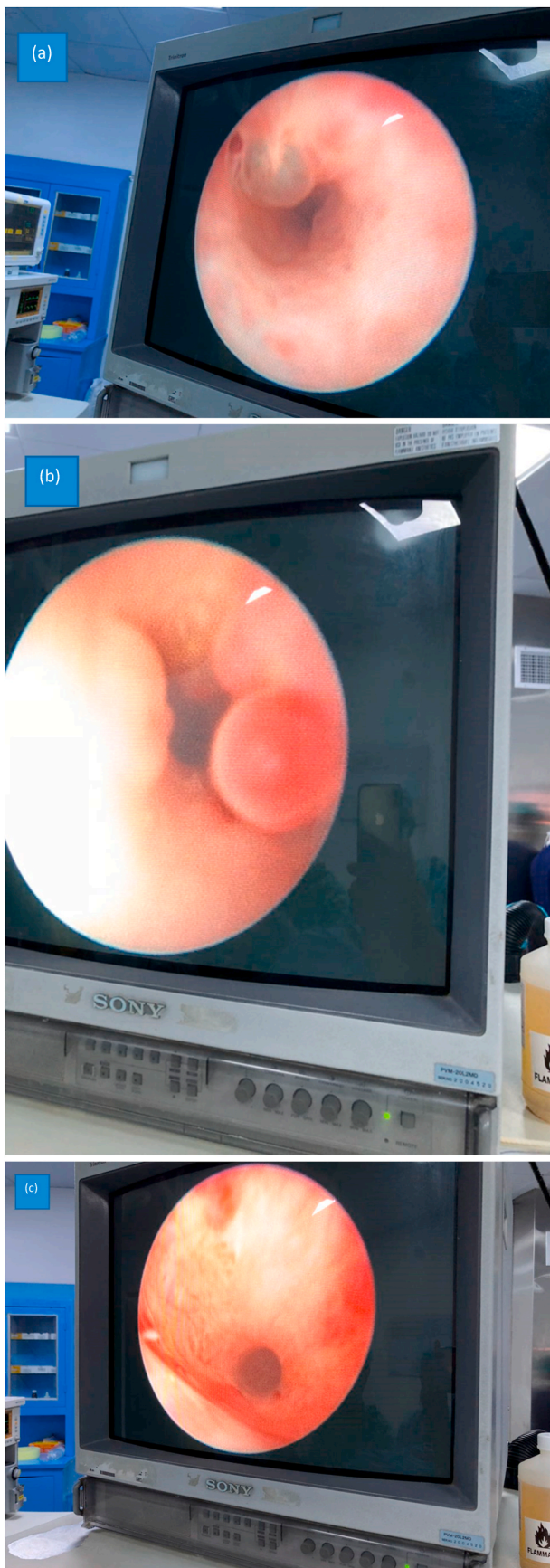


Fig. 1. “a” “b” “c” shows the presence of urethral hemangioma during cystoscopy before and after triamcinolone injection.

They are often associated with the presence of cutaneous hemangiomas and have also been associated with Klippel-Trenaunay syndrome. Presentation of urethral hemangiomas depends on the site and size of the lesion. Hemangiomas of anterior urethra may present as urethral bleeding and lesions located in the proximal urethra usually present as hematuria, urinary retention with blood clot. Large lesions can present with symptoms of urinary obstruction or protrude through urethral meatus.⁵ In our case, as our hospital doesn't have the facility of laser technology, we selected to treat the patient with simple transurethral/cystoscopy fulguration with diathermy and intralesional triamcinolone injection. Cystoscopic excision is much less invasive, it has not been well described in literature and we should keep in mind that diathermy or other more invasive approaches such as selective arterial embolization may be needed to control the bleeding from the feeding vessels because placing a catheter may not always control the bleed. Careful preoperative planning is required in order to determine the depth of the lesion as what we see cystoscopically may just be the tip of the iceberg.

Conclusion: Urethral hemangiomas are extremely rare malformations. Intralesional triamcinolone is a reasonable treatment in urethral hemangioma as well which has been widely used in cutaneous lesions. While doing cystoscopy for hematuria or bleeding per urethra, detailed visualization of meatus should be performed as well and findings should be documented.

References

1. Regragui S, Slaoui A, Karmouni T, El Khader K, Koutani A, Attya AI. Urethral hemangioma: case report and review of the literature. *Pan Afr Med J.* 2016;23:96. <https://doi.org/10.11604/pamj.2016.23.96.8700>. Published 2016 Mar 15.
2. Uchida K, Fukuta F, Ando M, et al. Female urethral hemangioma. *J Urol.* 2001;166(3):1008.
3. Sakir O, Serdar C, Güven A, Kutsal Y, Adil E. Caverosus hemangioma of the female urethra: a rare case report. *Urol J.* 2014;11(2):1521–1523.
4. De Silva-Gutiérrez Alfonso, Martínez-Méndez María Esther, González-Romo Marco Aurelio, Nava-Jácome Óscar, Castillo-Zurita Óscar, Morales-Díaz Joaquín, et al. Urethral hemangioma: a case report. *Rev Mex Urol.* 2013;73:50–53.
5. Efthimiou I, Kavouras D, Vasilakis P, Katsanis S. Hemangioma of penile urethra-treatment with simple transurethral excision: a case report. *Cases J.* 2009;2:6199.