Endoscopic Resection of Prostatic Urethral Fibroepithelial Polyp Case Report

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Abstract

Fibroepithelial polyps of the urethra are rare lesions in adults and are most frequently seen in males during the first decade of life. Patients usually present with an acute urinary retention but other symptoms like voiding problems, hematuria or recurrent urinary infection may be present.

As few cases have been described in the literature so far, our aim was to add one more case report to the literature, describing symptoms, diagnostic evaluation and treatment options of our patient and comparing them to reports found in recent literature. Beside physical examination, the investigations for these polyps usually include imaging exams (voiding cystourethrography and ultrasonography) and urinary endoscopy. However, the diagnosis is primarily established by pathology.

Keywords: Fibroepithelial Polyp, Endoscopic Resection.

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Case Presentation:

An 18 year old male patient with a history of obstructive urinary symptoms and gross hematuria presented to emergency room complaining of acute urinary retention that was managed by urethral catheter insertion.

The patient was investigated. Urinary tract ultrasound, CT scan & pelvic MRI were nondiagnostic (Figure .1). Urodynamic study was done which showed poor bladder compliance, prolonged voiding phase with a maximum flow of 14cc/sec. and significant postvoid residual urine.

The patient underwent cystourethroscopy which showed the presence of a vegetating polypoid mass measuring 8 cm in length that arises from the floor of the prostatic urethra just proximal to the verumontanum causing considerable outlet obstruction (Figure .2).

Endoscopic resection was performed successfully using 24 French resectoscope. The specimen was sent to pathology lab and the result was fibroepithelial polyp with cystitis cystica and glandularis.

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Discussion:

Fibroepithelial polyps of the urethra are usually diagnosed during the first decade of life [(1)].

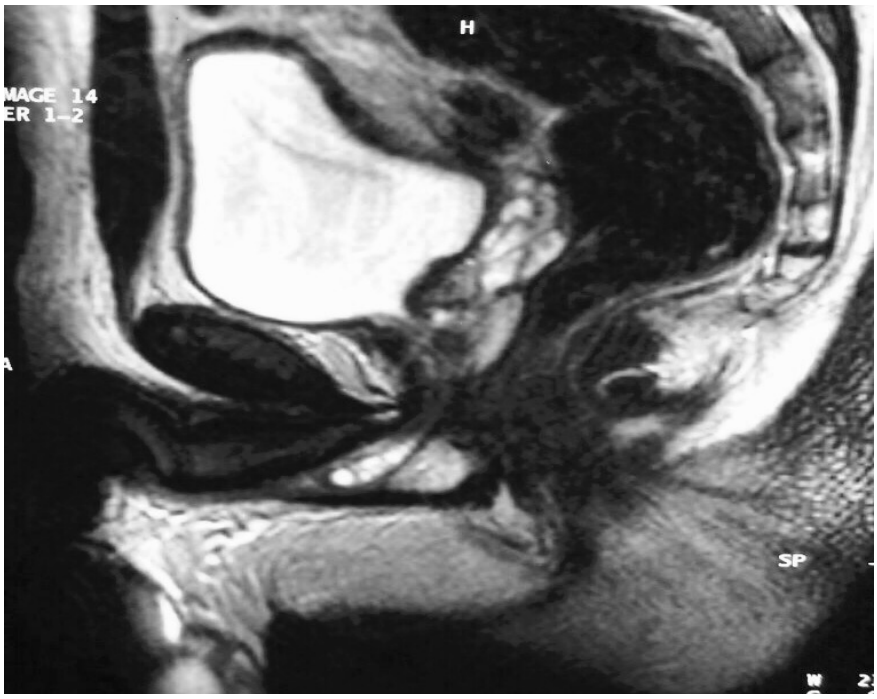

Figure 1: Pelvic MRI showing the prostatic urethra and the bladder neck

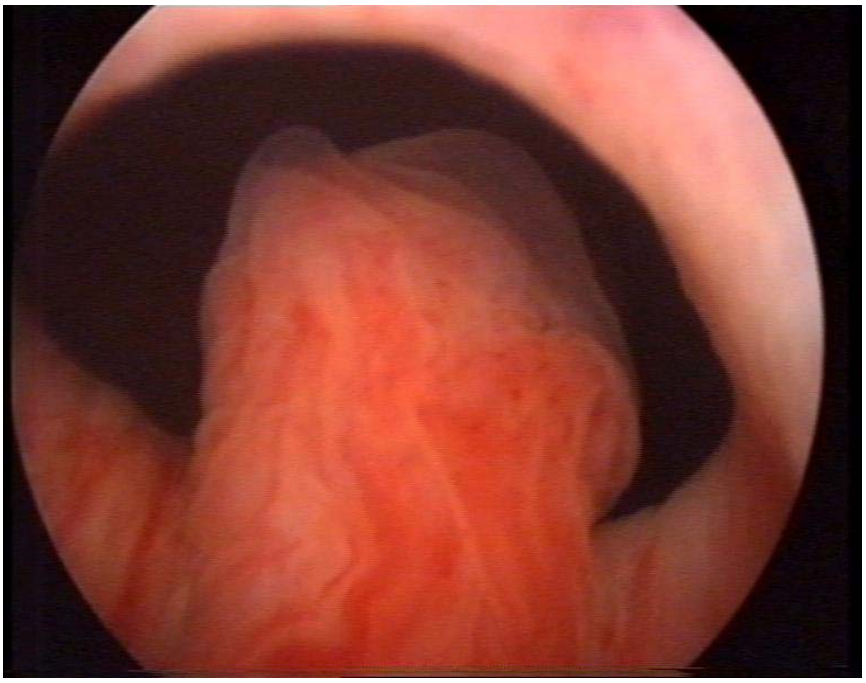

Figure 2: Endoscopic view of the fibroepithelial polyp protruding through the bladder neck

The etiology is controversial; however, congenital, irritative, infectious, obstructive and traumatic causes have been proposed[2].

The first case of urethral polyp was reported by John Hunter back in 1763 (in an ox), and Sir Henry Thompson reported the first case in a human[3].

The histological findings of the fibroepithelial congenital polyps of the prostatic urethra are those of benign polypoid lesions lined by transitional urothelium. Associated inflammation, erosion, ulceration, and reactive metaplastic changes may be present[4].

Literature revealed three types of fibroepithelial polyps. One of them consists of a fibrous structure, which is more distinct due to a more prominent component, with areas resembling cystitis cystica. The second form is built of many small fibrovascular cores covered with bland cytology of the epithelium. The last type consists of a big stalk with a prominent epithelial proliferation in the stroma. Fibroepithelial polyp may be confused with glandular carcinoma, if it exhibits dense, crowd proliferation of glands[5].

Symptoms due to intermittent or acute obstruction of the bladder outlet, such as hesitancy, diminished urinary stream, incomplete emptying and urinary retention are the main symptoms. With a reported incidence of 30% to 60%, hematuria is another common symptom. The differential diagnoses in these cases are extensive and include posterior urethral valves, inverted papilloma of the urinary bladder, acquired reactive polyps, ectopic prostatic tissue, villous polyps, prostatic adenocarcinoma, transitional cell carcinoma, and also malignant mesenchymal neoplasms of the urinary bladder such as rhabdomyosarcoma[6].

The diagnosis of urethral polyps is usually made by ultrasonography (US) and voiding cystourethrography (VCUG), but urethrocystoscopy is always diagnostic. MRI is indicated not only to identify the precise location of the lesion but to define the surgical approach to polypoid lesion. As reported, the polyp can be accessed and removed by transurethral excision or by open cystostomy[7].

Transurethral resection of a urethral polyp has become the treatment of choice. Endoscopic resection using electrocautery or laser energy is usually successful and open technique is rarely required[8].

Infrequently, there is recurrence after resection of a fibroepithelial polyp. Replapses mostly appear because of non-radical resection. They are not caused by malignant transformation[9,10].

However, diagnosis is primarily confirmed by the lesion's histological analysis. Differential diagnosis includes formations resulting from urothelial reactions, such as inflammatory processes and in post-menopausal women urethral caruncles. All these conditions reveal the development of "polypoid" lesions without characteristic of connective stroma with smooth muscle fibers, which are present in fibroepithelial polyps[11].

We reported a case of a fibroepithelial polyp of the prostatic urethra in an adult male who presented with obstructive urinary symptoms and urinary retention. The clinical and endoscopic findings are consistent with an

obstructing mass at the bladder neck and prostatic urethra, but the radiographic findings were equivocal. The lesion was completely removed by transurethral resection. Pathologic examination confirmed the diagnosis of a FEP of the prostatic urethra.

References

1. Fibroepithelial polyp of the urethra. Aita GA, Begliomini H, Mattos D Jr. Int Braz J Urol. 2005 Mar-Apr; 31 (2): 155-6.
2. Fibroepithelial congenital polyp of prostatic urethra in an adult man.Salehi M, Falahatkar S, Neiroomand H, Akbarpour M.Urol J. 2009 Fall; 6 (4): 301-2.
3. Congenital polyps of the prostatic urethra: A review of literature and report of two cases. Downs RA. Br J Urol 1970; 42:76
4. Fibroepithelial polyp of the prostatic urethra in an adolescent. Isaac J, Snow B, Lowichik A. J Pediatr Surg. 2006; 41: e29-31
5. Fibroepithelial polyp of the urinary bladder. Powała Agnieszka, Kuzaka Bolesław, Hanecki Ryszard, Ewa Skrzypek, Górnicka Barbara, Radziszewski Piotr. Journal of Solid Tumors, 2015; 5 (1).
6. Fibroepithelial congenital polyp of prostatic urethra in an adult man. Salehi M, Falahatkar S, Neiroomand H, Akbarpour M. Urol J. 2009 Fall; 6 (4): 301-2.
7. Recurrent Urine Retention Caused by a Posterior Urethral Polyp in a 8-Year-Old Boy. Harry Nikolić1*, Mirna Šubat-Dežulović2 , Mladen Jašić3*, Maksim Valenčić4 , Ivona Butorac-Ahel2 , Izidora Holjar-Erlić. medicina fluminensis 2012; 48 (1): 96-100.
8. Female urethral fibroepithelial polyp with stricture. Yamashita T, Masuda H, Yano M, Kobayashi T, Kawano K, Kihara K. J Urol. 2004; 171:357.
9. Fibroepithelial polyp of the lower urinary tract in adults. Tsuzuki T, Epstein JI. Am J Surg Pathol. 2005; 29: 460-466.
10. Recurrent ureteric fibroepithelial polyp in a child. Ruíz-López MJ, Ramírez-Garrido F, Nogueras-Ocaña M, et al. Eur J Pediatr. 2004; 163 (2): 124-5
11. Fibroepithelial Polyp of The Urethra Giuliano A. Aita, Helio Begliomini, Demerval Mattos JR. International Braz J Urol., 2005 March-April, 31 (2): 155-156.

استئصال ورم حميدي ليفي طلائي في الإحليل بواسطة المنظار

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الملخص

تعدُّ الأورام الحميدة الليفية الطلائية للإحليل قليلة الانتشار لدى البالغين، وغالبا ما تظهر في العقد الأول من العمر لدى الذكور. غالبا ما يشكو المريض من حصر حاد في البول وأحيانا من اضطرابات في التبول أو بيله دموية أو التهابات بولية متكررة. وبما أن عددا قليلا من الحالات تم تقريره فسوف نقوم بوصف هذه الحالة وذكر الأعراض التي عانى منها المريض وطرق تشخيصه وعلاجه ولإتاحة الفرصة لمقارنتها بحالات أخرى مشابهة. يتم تشخيص مثل هذه الحالات بالفحص السريري والصور الشعاعية الملونة او جهاز الموجات فوق الصوتية وبالتنظير ولكن التشخيص النهائي يكون بدراسة الأنسجة المرضي.

الكلمات الدالة: ورم حميدي ليفي، استئصال بواسطة المنظار.