Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Medicine

Bladder Neck Preserving Resection of a Prostatic Urethral Fibroepithelial Polyp in a Young Man: A Case Report

Ahmad Jaradat[1,2*], Safaa Abatli[1], Faris Abushamma[1,2], Amir Aghbar[2]

[1]Department of Medicine, Faculty of medicine and health Sciences, An-Najah National University, Nablus, 44839, Palestine
[2]Department of Urology, An-Najah National University Hospital, Nablus, 44839, Palestine

DOI: 10.36347/sjmcr.2021.v09i12.008 | **Received:** 02.11.2021 | **Accepted:** 07.12.2021 | **Published:** 10.12.2021

***Corresponding author:** Ahmad Jaradat

Abstract **Case Report**

Prostatic urethral fibroepithelial polyps are quite rare congenital lesions of the male urethra. Most cases have been described in children. However, adult cases have also been reported. Herein, we report a case of a 24-year-old male who presented with voiding lower urinary tract symptoms and was finally diagnosed to have a prostatic urethral fibroepithelial polyp. He was treated with a bladder neck preserving transurethral resection, with no recurrence after one year of follow-up. The rare cause, in addition, the modified approach, encouraged us to report this case.

Keywords: Case report; fibroepithelial polyp; prostate; prostatic polyp; adult.

INTRODUCTION

Fibroepithelial polyps of the prostatic urethra are rare congenital lesions diagnosed in different age groups, with different presentations [1, 2]. Diverse lower urinary tract symptoms, including both voiding and storage symptoms, gross hematuria, heamatospermia, and urinary retention, have been described as presenting complaints [1, 3-5]. Prostatic urethral polyps are usually benign, and recurrences are exceptional [6].

Lower urinary tract symptoms in young adults are not uncommon. A wide range of differential diagnoses should be considered for this age group. The diagnosis of fibroepithelial prostatic polyps is made histologically after resection but can be pointed out through imaging studies like ultrasound and urethrogram. Treatment is usually done endoscopically; however, some old reports described an open surgical approach.

We present a 24-year-old male presenting with obstructive lower urinary tract symptoms and bilateral hydronephrosis due to a prostatic urethral fibroepithelial polyp which was treated by a bladder neck preserving approach.

CASE PRESENTATION

A 24- year-old male patient presented with voiding lower urinary tract symptoms that lasted for two years before presentation, associated with pelvic pain, bilateral flank pain during voiding, and painful ejaculation. Urine analysis, serum creatinine, and seminal fluid analysis were all normal. However, ultrasound of the urinary tract showed moderate bilateral hydronephrosis associated with a thick bladder wall, in addition to a polypoid structure protruding about 1 cm through the bladder neck and mimicking a small median loop. These findings were associated with incomplete bladder emptying.

Urethro-cystoscopy showed a pedunculated polyp measuring around 2-cm in length, arising from the prostatic urethra just proximal to the verumontanum, and protruding into the bladder and causing obstruction at the level of the bladder neck (Figure 1-a), associated with a trabeculated bladder wall (Figure 1-b) and a stadium shape ureteric orifices (Figure 1-c).

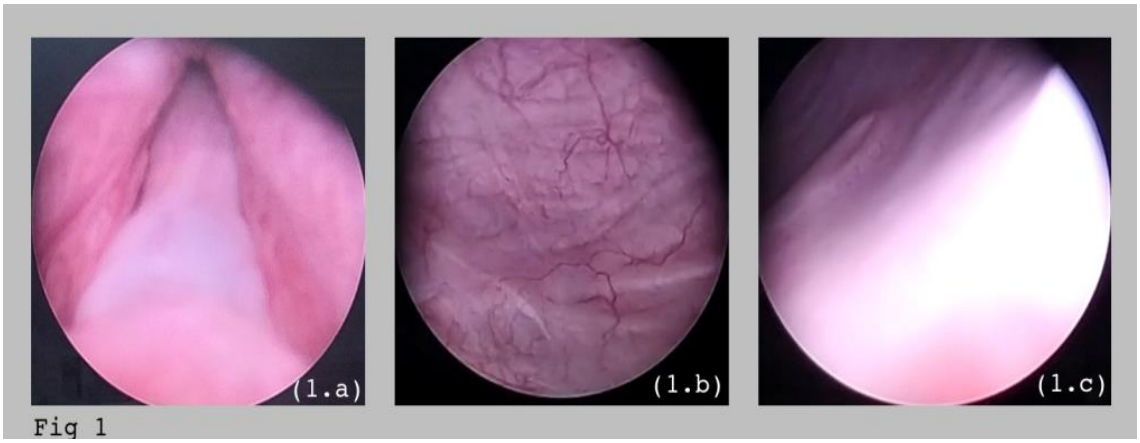

Fig-1. (a, b): Cystoscopic view (a) a pedunculated polyp arose from the prostatic urethra proximal to the verumontanum and obstructed the bladder neck. (b) Stadium shape ureteric orifice.

Systematic staged resection of the polyp was followed to assure bladder neck preservation (Figure 2). Initially, the polyp was divided by an imaginary line at the level where it enters the bladder into two parts, the body (the part proximal to the line) and stalk (the part distal to the line) (Figure 2-a).

In the first stage (Figure 2-b), the body was retrogradely resected at the imaginary line level using the resectoscope's cutting current. By now, the body has been separated from the stalk and the bladder neck is clearly identified, making resection of the stalk safe (Figure 2-c).

To respect the stalk (Figure 2-d), the resectoscope loop was inserted behind the stalk till it reached its base. Using the cutting current, the stalk was resected antigradly as one piece (Figure 2-e). Followed by coagulation of its base to secure hemostasis (Figure 2-f).

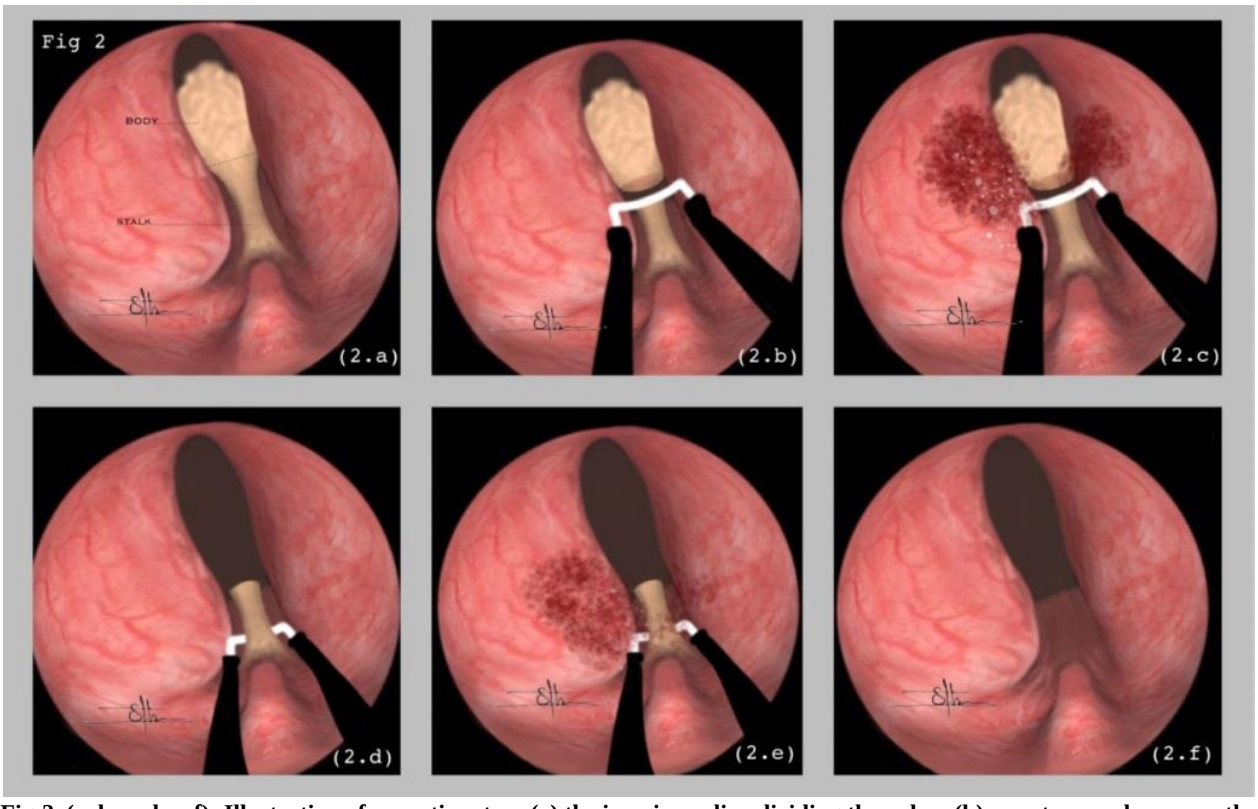

Fig-2. (a, b, c, d, e, f): Illustration of operative steps (a) the imaginary line dividing the polyp. (b) resectoscope loop over the line, (c) retrograde resection of the body. (d) resectoscope loop behind at the stalk base. (e) antigrade resection of the stalk. (f) Post-resection.

Post resection, the bladder neck was intact with no evidence of injury (Figure 3). Histopathological examination reviled a urothelium-lined polypoid lesion with acinar structures lined by benign-looking columnar cells and intraluminal secretions and congested vessels,

consistent with the diagnosis of prostatic urethral fibroepithelial polyps (Figure 4).

Fig-3: Cystoscopic view post-resection shows an intact bladder neck.

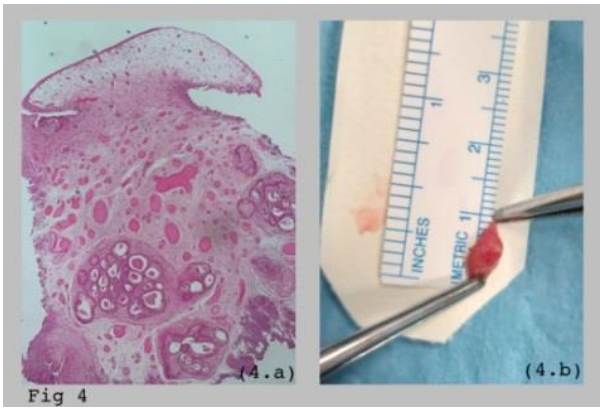

Fig-4: (a,b) (a) Gross appearance of the body after resection. (b) H&E stain shows a urothelium-lined polypoid lesion with acinar structures lined by benign-looking columnar cells.

The postoperative course went smooth with the resolution of symptoms and hydronephrosis, and he did not report ejaculatory dysfunction as well.

DISCUSSION

Fibroepithelial polyps of the prostatic urethra are considered benign lesions [2], presenting with a wide range of symptoms in different age groups from infancy to adulthood. Most cases were reported in children. However, adult cases have also been described.

The definitive diagnosis is made histologically, as symptoms are non-specific, and imaging studies like urethrograms and ultrasound scans carry different possibilities. The presence of an apparent mass-like lesion in the bladder neck area by ultrasound scan in an adult patient mandates further evaluation. Although, Urethrocystoscopy is the procedure of choice to characterize bladder masses, in our patient, urethrocustocopy was done and showed the characteristic appearance of the prostatic urethral fibroepithelial polyp.

In our case, the upper urinary tract was also affected, which was reflected as dilatation of the pelvicalyceal system and the vesicoureteric junction. This effect was also reported before and was believed to be due to vesicoureteral reflux (VUR) in some cases [7].

Many therapeutic approaches have been described to manage prostatic urethral fibroepithelial polyps. Open surgical approach was described through a perennial urethrostomy approach [7]. Transurethral resection was also described as an alternative minimally invasive approach [8]. Polypectomy snare for en blocresection of prostatic urethral fibroepithelial polyps [9] was also described as another minimally invasive approach.

In this case, we have described a modified approach for transurethral resection, aiming to minimize the risk of bladder neck injury to prevent retrograde ejaculation. Our approach depends on systematic staged resection of the polyp rather than en bloc resection. Retrograde resection of the body allowed us to visualize the bladder neck during subsequent resection of the remaining part.

CONCLUSION

Systematic staged resection of prostatic urethral fibroepithelial polyps ensured a safe and complete resection without causing bladder neck injury.

ACKNOWLEDGMENTS

The authors thank Dr. Sa'ed Zyoud at the Clinical Research Center of An-Najah National University Hospital for his wise pieces of advice, Dr. Hanood Abu-Rass, department of biomedical sciences, faculty of medicine and health sciences, An-Najah national university for providing the histological description. And many thanks for Mr.Ra'ed Haddad for his help.

REFERENCES

1. Sekido, N., Hinotsu, S., Akaza, H., & Koiso, K. (1994). Fibroepithelial polyp of the prostatic urethra: report of two cases and review of the literature. *Nihon Hinyokika Gakkai zasshi. The japanese journal of urology*, *85*(9), 1403-1406.
2. De Castro, R., Campobasso, P., Belloli, G., & Pavanello, P. (1993). Solitary polyp of posterior urethra in children: report on seventeen cases. *European journal of pediatric surgery*, *3*(02), 92-96.
3. Tayib, A., Al-Maghrabi, J., & Mosli, H. (2004). Urethral polyp verumontanum. *The Saudi Medical Journal*, *25*(8).
4. Isaac, J., Snow, B., & Lowichik, A. (2006). Fibroepithelial polyp of the prostatic urethra in an

adolescent. *Journal of pediatric surgery*, *41*(12), e29-e31.

5. Sato, N., Sakurayama, Y., Ishikawa, T., & Takazawa, H. (1990). Papillary adenoma of the prostatic urethra--a case report and review of 61 cases in Japan. *Hinyokika kiyo. Acta urologica Japonica*, *36*(5), 623-626.
6. Akbarzadeh, A., Khorramirouz, R., & Kajbafzadeh, A. M. (2014). Congenital urethral polyps in children: report of 18 patients and review of literature. *Journal of pediatric surgery*, *49*(5), 835-839.
7. Roller, M. F., & Naranjo, C. A. (1975). Benign urethral polyp of prostatic urethra. *Urology*, *6*(1), 34-36.
8. Dewolf, W. C., & Fraley, E. E. (1973). Congenital urethral polyp in the infant: case report and review of the literature. *The Journal of urology*, *109*(3), 515-516.
9. Brekelbaum, C. E., Veeramachaneni, R., Fontane, R., Salard, G., & Venable, D. D. (2002). Unique management of a congenital polyp of the prostatic urethra. *The Journal of urology*, *168*(2), 647-648.