

Urethral polyp verumontanum

Abdulmalik M. Tayib, FACHARTZ, FEBU, Jaudah A. Al-Maghrabi, FRCPC, FCAP, Hisham A. Mosli, FRCSC, FACS.

ABSTRACT

Congenital posterior urethral polyps are rare benign lesions that can cause a variety of symptoms in young boys, the diagnosis is usually made by cystourethrogram and ultrasonography where the polyp appears as a soft tissue mass arising at the base of the urinary bladder. We present a case of verumontanum polyp in a 7-year-old boy who presented to us in October 2001 with terminal hematuria, dysuria, interrupted stream and suprapubic pain. The polyp was diagnosed by ultrasonography and cystourethrogram. Transurethral resection of the polyp was performed and pathological assessment revealed a fibroepithelial lesion which is consistent with congenital posterior urethral polyp. After 18 months follow up, the patient was free of symptoms. We reviewed the literature to identify the presentation, diagnosis, treatment options and prognosis of these polyps. In the past 20 years the posterior urethral polyp has become more common than before, and it should be considered in boys with lower urinary tract dysfunction and hematuria.

Saudi Med J 2004; Vol. 25 (8): 1115-1116

Urethral polyps are rare lesions that may occur in the anterior and posterior urethra. Anterior urethral lesions are less frequent than posterior urethral polyps. Medline and pubmed literature search revealed 48 articles and case reports from different parts of the world, only 5 cases of congenital anterior urethral polyps were reported while posterior urethral polyp become more common than before. Kimche and Lask¹ reported that only 50 cases was reported in 1982. Our recent literature review revealed the presence of 138 cases reported worldwide. De Castro et al² reported the largest international series of 17 patients, studied at the University of Bologna in Italy. Congenital polyps are usually fibroepithelial lesions and are different from the polypoid lesions caused by indwelling catheters.

Case Report. We present a case of a 7-year-old boy with terminal hematuria of 3 weeks duration, burning micturition, interrupted stream

and suprapubic pain. Urine analysis revealed that urine is loaded with red blood cells. Cystourethrogram showed filling defect at the prostatic urethra extending into the bladder neck (**Figure 1**). Ultrasonography showed small pedunculated mass at the area of the bladder neck (**Figure 2**). Urethrocystoscopy showed urethral polyp attached at its base with the verumontanum and pedunculated through the bladder neck into the bladder. Transurethral resection of the polyp was performed. Pathological examination revealed a fibroepithelial polyp that is covered by inflamed urothelium and squamous metaplasia. The subepithelial stroma consisted of loose fibrous tissue and few inflammatory cells. No prostatic glandular tissue could be identified. After 18 months of follow up, the patient was free of the symptoms.

Discussion. Congenital posterior urethral polyps are uncommon lesions, mostly occurring in

From the Department of Pathology (Al-Maghrabi) and the Department of Urology (Tayib, Mosli), King Abdul-Aziz University Hospital, Jeddah, Kingdom of Saudi Arabia.

Received 21st October 2003. Accepted for publication in final form 15th February 2004.

Address correspondence and reprint request to: Dr. Abdulmalik M. Tayib, Chairman, Department of Urology, King Abdul-Aziz University Hospital, PO Box 122762, Jeddah 21332, Kingdom of Saudi Arabia. Tel. 966 (2) 6401000. Fax. +966 (2) 6408347. E-mail: srraams@hotmail.com



Figure 1 - Voiding cystourethrogram.

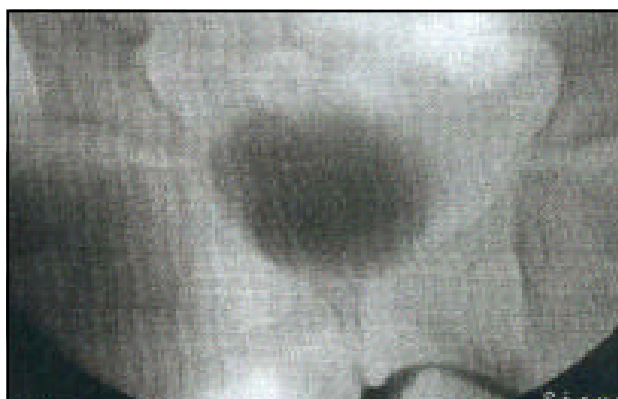


Figure 2 - Ultrasound of the urinary bladder.

young boys but may be present in infants.^{3,4} They cause a variety of symptoms including hematuria, irritative and obstructive symptoms such as acute urinary retention. The most common presenting symptoms were microscopic or macroscopic hematuria.⁵ Careful attention should be paid to the prostatic urethra in boys presenting with hematuria and or voiding dysfunction, as posterior urethral polyps became more common than have been reported 20 years ago.

Voiding cystourethrography is the best available diagnostic method to detect urethral polyps, it reveals a filling defect localized in the posterior urethra protruding into the bladder neck.

The ultrasonographic features of these polyps have only been reported in a few cases, the polyp was demonstrated initially by sonography as a soft tissue mass arising at the base of the urinary bladder.⁶ Complete transurethral resection was successful with no recurrence.^{2,5} Safety and efficacy of neodymium laser for excision of posterior urethral polyps were reported⁷ and few cases were treated by excision through open cystostomy in cases where it was technically difficult for transurethral resection.⁸ Histopathology examination revealed 2 distinct types of polyps. Congenital urethral polyps are fibroepithelial polyps that are covered usually by urothelium which may be inflamed, ulcerated or exhibit squamous metaplasia. This differs from a more common prostatic urethral polyp occurring in adults, which is covered by prostatic epithelium. The congenital type contains no prostatic glandular tissue while the other type contains additionally smooth muscles and islands of glandular cells and even nerve tissue.⁸⁻¹⁰

Immuno histochemical techniques have verified these polyps in men to be of prostatic epithelial origin.¹¹ The rare anterior urethral polyp has the same morphology as the posterior one. Transurethral resection of the polyp is successful and no recurrence has been reported.

References

1. Kimche D, Lask D. Congenital polyp of prostatic urethra. *J Urol* 1982; 127: 134.
2. De Castro R, Campobasso P, Belloli G, Pavanello P. Solitary polyp of posterior urethra in children report of seventeen cases. *Eur J Pediatr Surg* 1993; 3: 92-96.
3. Amrani A, El Quessar A, Belkacem R, Outarahout O, Benamour H. Ann Polyps of the posterior urethra in children. *Ann Urol (Paris)* 1997; 31: 225-227.
4. Zulian RA, Brito RR, Borges HJ. Transurethral resection of pedunculated congenital polyps of the posterior urethra. *Br J Urol* 1982; 54: 45-48.
5. Gleason PE, Kramer SA. Genitourinary polyps in children. *Urology* 1994; 44: 106-109.
6. Arteaga J, Tran-Minh VA, Pracros JP, Mollard P. Sonographic diagnosis of polyp of the prostatic urethra in children. *J Clin Ultrasound* 1993; 21: 188-193.
7. Gentle DL, Kaufman RP Jr, Mandell J. Use of neodymium: Yttrium-Aluminum-Garnet Laser for removal of a congenital posterior urethral polyp in 3-year-old child: a case report and review of the literature. *Urology* 1996; 47: 445-447.
8. Schafer J, Porkolab L, Pinter A. Congenital urethral polyps. Rare cause of obstructive uropathy in childhood. *Urology* 1984; 24: 499-501.
9. Fan K, Schaefer RF, Venable M. Urethral verumontanal polyp: evidence of prostatic origin. *Urology* 1984; 24: 499-501.
10. Kunimi K, Shimamura M, Miyagi T, Kurumaya H. Fibroepithelial polyp of the verumontanum. A case report and literature review. *Int Urol Nephrol* 1994; 26: 669-672.
11. Richard S, Foster R, Garrett A. Congenital posterior urethral polyps. *J Urol* 1986; 36: 670-672.