Original Article

Posterior Urethral Polyp in Children

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Abstract

Background: Polyps of the urethra is a rare cause of obstruction of the lower urinary tract. The clinical presentation is not specific; the symptoms vary and may be isolated or associated, including acute retention of urine, dysuria, and hematuria. Ultrasound and voiding urethrocystography guide the diagnosis. Urethrocystoscopy confirms the diagnosis and allow the treatment. Our aim is to bring to light this rare condition and report our experience in the management of posterior urethral polyps. **Subject and Methods:** A retrospective study of posterior urethral polyp presented from 2008 to 2019 was performed. Charts were evaluated for clinical presentation, management, pathology findings, and long term follow-up. **Results:** Six patients were recorded. Dysuria and hematuria are the most reported features. Ultrasonography and voiding cystourethrogram made the diagnosis in 4 patients out of 6. Urethrocystoscopy made the diagnosis and transurethral resection in all our patients. **Conclusions:** Posterior urethral polyp is a rare benign tumor in children. Urethrocystscopy allow both diagnostic and therapeutic.

Keywords: Child, polyp, urethra

Introduction

Congenital urethral polyps are a rare congenital entity; however, they most often appear as benign growths of the posterior urethra in the male patient.[1] They cause various symptoms that can be episodes of acute retention of urine, dysuria and haematuria.[2] The diagnosis can be suspected by ultrasonography and voiding cystourethrogram and confirmed by urethrocystoscopy which can be diagnostic and therapeutic. We report our experience in a period of 11 years with posterior urethral in children.

Materials and Methods

This is a retrospective study of children that presented with posterior urethral polyp from June 2008 to December 2019. The data were collected from case notes, operation records and discharge summaries. Clinical presentation, management, pathology findings and long-term follow-up were evaluated.

Results

Six male patients were recorded. The lowest age at presentation was 2 years, while the oldest was 5 years with a median age of 3 years. Four patients presented with intermittent dysuria during a median interval of 2 months. Two patients presented to our emergency unit with acute urinary retention. Intermittent episode of haematuria was reported in four patients. Clinical examination revealed a vesicale globe in four patients. Ultrasonography showed a polypoidal thickening of the vesical trigone in two patients which made to suspect a rhabdomyosarcoma and a right hydronephrosis in one patient. Voiding cystourethrogram showed a filling defect in the posterior urethra in four patients [Figure 1] and associated with a low-grade right vesicoureteral reflux in 1. Urethrocystoscopy revealed a pedunculated polyp arising from the veru montanum in all [Figure 2]. Fulguration of its base was performed. The polyp was retrieved from the urethra in 5 and through a cystotomy in 1 because of its large size [Figure 3]. The histological examination of all the specimens showed a smooth polyp with a size ranging from 1 to 2 cm consistent with a fibroepithelial polyp. The postoperative course was uneventful with a good urine stream and no recurrence with a spontaneous resolution of the low-grade right vesicourethral reflux after a median follow-up of 2 years.

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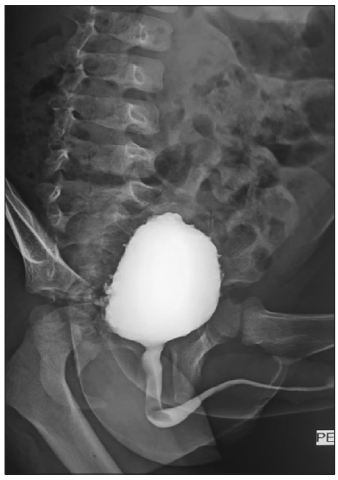

Figure 1: Cystourethrogram showing a filling defect in the posterior and membranous urethra and bladder diverticula

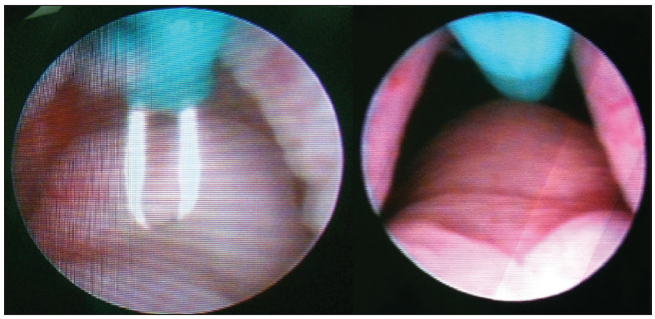

Figure 2: Urethroscopic view of the polyp pushed from the posterior urethra towards the bladder

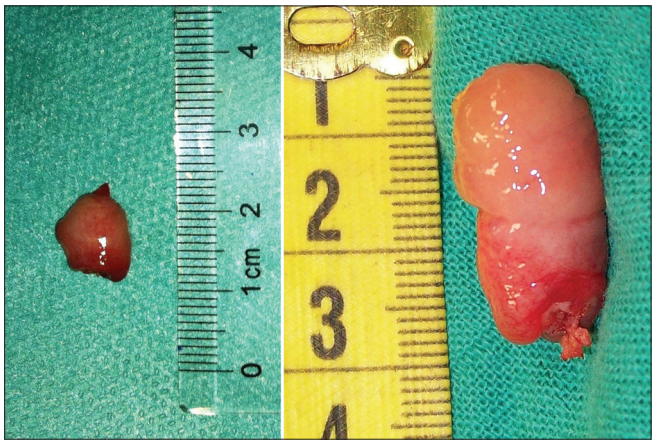

Figure 3: Different size and aspect of polyps and their implantations

Discussion

The polyps of the urethra are a rare abnormality of the urethra. The exact incidence is unknown; those diagnosed in the paediatric population are congenital polyps that almost always occur in verumontanum.[3] They are benign fibroepithelial polyps. The main symptoms are acute urinary retention or intermittent obstruction due to prolapse in the bladder neck or obstruction of the urethra, haematuria, urinary tract infections and enuresis.[4-6] The origin of posterior urethra polyps is still controversial. The presence of a large number of polyps in healthy newborn and infants is a strong argument in favour of a congenital origin.[7] Downs reported that the polyps originate from remains of Muller's tubercle that fail to regress.[7] Kuppusami and Moors emphasise the possible links between the metaplastic epithelium sometimes present in the polyp with oestrogen released during pregnancy.[8] It has been reported that 50% of patients with urethral polyps have another urinary tract anomaly, especially vesicoureteral reflux.[2] Unlike valves in the posterior urethra, polyps do not damage the urinary tract.[9] Ultrasonography and voiding urethrocystogram are the important imaging examinations for diagnosis, but confirmation is made by urethrocystoscopy. Transurethral resection by electrocoagulation, cold blade or laser are available therapeutic options.[5,10] However, when the diameter of the polyp is more than 1 cm, it can be retrieved through a transvesical approach after endoscopic fulguration.[2] Open surgery should be used only when a transurethral resection, a suprapubic endoscopic approach or a combination of two previous techniques is impossible. The prognosis is excellent without recurrence after complete resection.[11]

The polyp of the urethra is a rare benign tumour, usually suspected by obstructive symptoms of the lower urinary tract. Urethrocystoscopy confirms the diagnosis. Treatment consists of endoscopic removal.

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Conflicts of interest

There are no conflicts of interest.

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