

Congenital posterior urethral polyps: Evaluation of diagnostic methods*

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Summary

Congenital posterior urethral polyps are rare and benign lesions that can cause a variety of symptoms such as obstruction, urinary retention or hematuria. In most of the cases the diagnosis is made by voiding cystourethrography (VCUG) or endoscopy. The definitive diagnosis can also be established with ultrasonography without the need of other invasive techniques. We present our two cases with congenital urethral polyp that are diagnosed by ultrasonic examination.

Key words: Posterior urethral polyp

Introduction

Congenital posterior urethral polyps are unusual lesions arising from verumontanum in young boys. The symptoms of bladder outlet obstruction, hematuria and urinary retention are the most common complaints. Infection, enuresis and hydronephrosis may accompany the lesion (4,5). The disputatious origin of the lesion is suggested congenital (3,4,5). Diagnosis is usually confirmed by voiding cystourethrography (VCUG) and/or endoscopy. However, De Filippi et al (2) and Caro et al (1) reported that, sonography can provide adequate information about posterior urethral polyps. On the occasion of two cases, we want to express the increasing importance of the sonography in diagnosis of these lesions.

Case Report

Case 1: An 11-year-old boy was admitted to our department with acute urinary obstruction, in the year 1990. Previously, he had not any complaints for

years. In ultrasonography a 1x1.5 cm polypoid mass was detected at the bladder neck (Figure 1). In excretory urogram (IVU) a filling defect in the bladder was seen lateral to the balloon of the Foley catheter (Figure 2). The diagnosis was confirmed with VCUG and endoscopy. The polyp was removed by a suprapubic transverse incision. Histopathologic examination revealed that the polyp was covered with transitional epithelium and showed hyperplasia and squamous metaplasia in some areas.

Case 2: A 1.5-year-old boy was admitted to our department in the year 1992. His complaint was frequent and difficult voiding for the last six months. In urine culture *Escherichia coli* was isolated. Ultrasonography revealed a polyp at the bladder neck (Figure 3). After the confirmation of diagnosis with VCUG and endoscopy, a polyp was removed by a suprapubic transverse incision (Figure 4). Histology revealed a polyp covered with transitional epithelium showing hyperplasia and squamous metaplasia in some areas. Additionally, the polyp was containing glandular elements and mononuclear infiltration.



Figure 1. Bladder (B) sonogram of the first case, showing a solid polypoid mass (arrow) in the lumen.

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Figure 2. IVU of the first case. Polyp (arrow) is seen as a filling defect lateral to the balloon of Foley (F) catheter

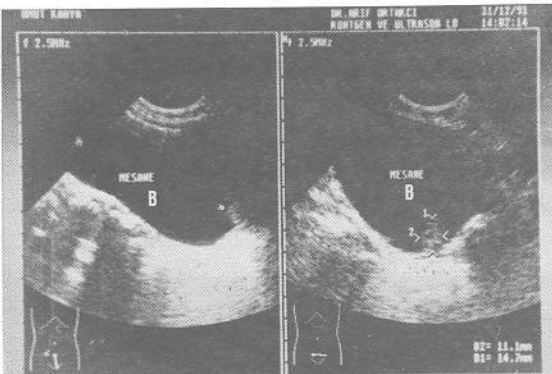


Figure 3. Bladder (B) sonogram of the second case, showing the polyp (arrows) in the lumen

In follow-up controls both of the patients were voiding normally.

Discussion

Congenital posterior urethral polyps are uncommon lesions and can be treated easily by open surgery or

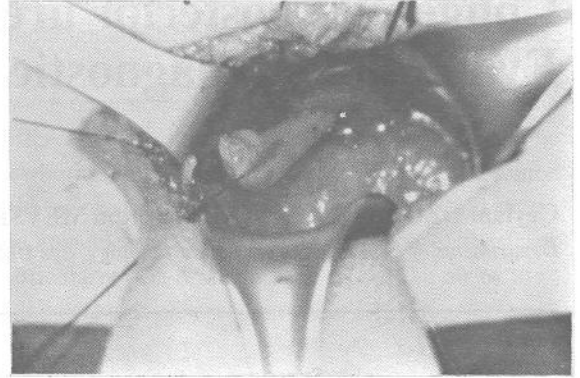


Figure 4. The bladder through suprapubic cystostomy in the second case. Stalk of the polyp (arrow) passes through the urethral orifice

endoscopy. Only a few more than 60 cases had been described by 1986⁽⁴⁾.

Downs⁽³⁾ reviewed the literature on a vast scale and discussed all the published cases. In his article, he stated the importance of the VCUG. Since then, reports have been more frequent with the more general use of VCUG⁽⁴⁾. At the last decade increasing number of cases are reported, thus, it can be thought that this pathology is not extremely rare as it was thought before. In the previous years, probably, the diagnostic difficulties made us to consider that those lesions are unusual. As far as the presentation of fine cystoscopic equipment that can be used in small children, the only diagnostic method was VCUG.

IVU alone is not sufficient for diagnosis⁽⁵⁾. In IVU upper urinary system findings secondary to the obstruction of the posterior urethra or the shadow of a large polyp that prolapsed into the bladder may be detected.

De Filippi et al⁽²⁾ and Caro et al⁽¹⁾ reported that the diagnosis of congenital posterior urethral polyp can be made by ultrasonography. Caro et al⁽¹⁾, in their article with the apropos of an 18-day-old baby, suggest that the presence and often the cause of upper and lower urinary tract obstruction in the neonate can be easily demonstrated by sonography. Both of our cases were referred to us after the ultrasonographic examination with the diagnosis of posterior urethral polyp, and one of them is 1.5 years old. It seems, the age of diagnosis will decrease with the more widespread use of sonography.

In conclusion, ultrasonography is a valuable procedure in the diagnosis of congenital posterior urethral polyps, especially in younger age groups.

References

1. Caro PA, Rosenberg HK, Snyder HM: Congenital urethral polyp. AJR 147:1041, 1986
2. De Filippi G, Derchi LE, Coppi M, Biggi E: Sonographic diagnosis of urethral polyp in a child. *Pediatr Radiol* 13:351, 1983
3. Downs RA: Congenital polyps of the prostatic urethra. A review of the literature and report of two cases. *Br J Urol* 42:76, 1970
4. Foster RS, Garrett RA: Congenital posterior urethral polyps. *J Urol* 136:670, 1986
5. Kearney GP, Lebowitz RL, Retik AB: Obstructing polyps of the posterior urethra in boys: Embryology and management. *J Urol* 122:802, 1979