

Fibroepithelial polyp of the glans penis in two children, a rare cause of penile mass: A case report

Patil Prashant S, Gupta Abhaya, Rahul Gupta, Kothari Paras L, Kekre Geeta, Vishesh Dikshit.

Department of Pediatric Surgery, L.T.M.G.Hospital, Sion, Mumbai, Maharashtra

Abstract

Fibroepithelial polyps of glans penis are rare in children. We present two male children with polyp over glans penis. The lesion was excised completely in both cases. Histopathological examination revealed fibroepithelial polyp in both patients. All of the reported cases published previously, except two are described in adults and all of them have been associated with the history of long-term condom catheter use. Only two cases have been reported in English literature in pediatric patients. We add two more cases to this rare entity in children.

Keywords

Glans penis; fibroepithelial polyp; meatoplasty; malignant transformation.

Copyright © 2016 pediatricurologycasereports.com.

Corresponding Author:

Dr Prashant S Patil, Ward 1A, Paediatric surgery ward, L.T.M.G. hospital, Sion, Mumbai

E-mail: docprashant2010@gmail.com

Accepted for publication: 13 March 2016

Introduction

Glans penis mass is a rare cause of glans swelling in childhood [1]. These masses are usually hemangioma, epidermal inclusion cysts, fibroma, neurofibroma, and ventral raphe cysts. Fibroepithelial polyps originating from the urogenital

epithelium are more commonly localized in the renal pelvis, bladder, and posterior urethra. However, fibroepithelial polyps on glans penis are uncommon and are distinct from polyps occurring in the skin or urinary system [2,3]. So far, 21 cases of fibroepithelial polyps arising from penis have been published. We present two more cases and discuss the relevant literature.

Case Reports

A 3 year-old male patient was admitted to the hospital for a swelling over glans penis

[Fig. 1]. The parents of the patient noticed a swelling on glans penis 2 months back.



Fig. 1. Polyp over glans penis.

Child complained of straining and burning while passing urine since last 2 weeks. Parents told that the mass was not present since birth. Physical examination revealed an intact foreskin and a conical, clear cystic mass 5 mm × 6 mm in diameter, localized on the ventral side of the glans penis. It was more on right side of midline, just adjacent to the urethral meatus and partly deviating but not obstructing the meatus.

Physical examination was otherwise normal. Blood tests and abdominal ultrasonography for kidney, ureter and bladder were normal. At surgery, cystourethroscopy was performed first to check for an opening of the mass to the urethra, and to rule out any associated anomaly in the lower urinary tract. No abnormality was found. Polyp was excised in totally and meatoplasty was done [Fig. 2].



Fig. 2. Immediate post-op photo after complete excision of polyp.

Histopathological examination showed a polypoid lesion surrounded by keratinized squamous epithelium with loose and well-vascularized stroma. The histological diagnosis was suggestive of a fibroepithelial polyp [Fig. 3]. Postoperative cosmetic appearance of the glans penis was good. No recurrence was observed during 1-year follow-up [Fig. 4].

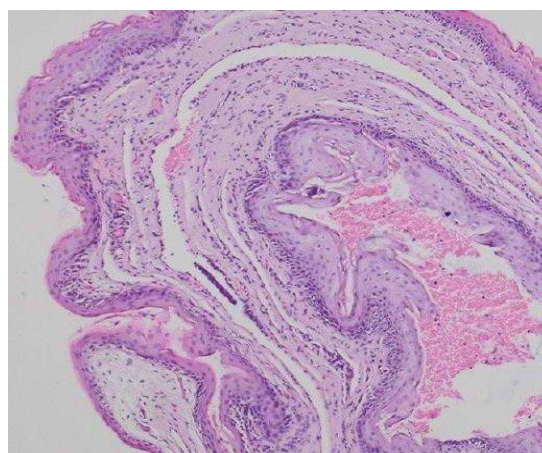


Fig. 3. Histopathological appearance of fibroepithelial polyp.



Fig. 4. Follow-up at 1 year.

Second case was a 4 years old male child with swelling over ventral surface of glans in midline near frenulum, palpable through preputial skin. On retracting prepuce we found a polyp like structure similar to first case [Fig. 5].



Fig. 5. Polyp over glans penis, near frenulum.

The lesion was excised and glans edges were approximated [Fig. 6]. Good cosmetic result was achieved without recurrence in follow-up.



Fig. 6. Post-excision repair of glans penis.

Discussion

Fibroepithelial polyps are rare; however, they are the most common benign mesodermal tumors of the urinary tract [2]. Fibroepithelial polyps within the urinary tract in childhood are commonly found in proximal ureter, renal pelvis, bladder and urethra. They rarely occur in the posterior urethra or bladder [4]. Fibroepithelial polyps of the glans penis were first reported by Fetsch and colleagues in 2004. 16 cases of fibroepithelial polyps originating from the glans penis have been published in the literature, only two of them have been described in children [5-7]. Fibroepithelial polyps of the glans penis differ from those involving the urinary tract with regard to their pathogenesis, shape, size and histologic features. Fibroepithelial polyps arising from glans penis in adults have been reported to be associated with chronic condom catheter use [2]. Fibroepithelial polyp of glans penis

is considered to be a reactive process to local pressure of chronic condom catheter [2,8]. However, these theories fail to explain pathogenesis of glans polyp in children in absence of any local source of chronic irritation or infection as relevant with present cases. Therefore, it might be proposed that fibroepithelial polyps arising from the glans penis in childhood are congenital or idiopathic in nature. The prognosis is usually good, but local recurrence has been reported [3,8,9]. Malignant degeneration is uncommon. To date, four cases of fibroepithelial polyps degenerating into squamous cell carcinoma have been reported in literature [5,10]. Predisposing factor for malignant transformation are large size of polyp, rich vascularity of polyp, foci of dysplasia in polyp and persistent chronic local irritation. Fibroma, neurofibroma, hemangioma, epidermal inclusion cysts, and ventral raphe cysts are to be ruled out for a case of mass over glans penis in childhood. Most of these

lesions can be surgically excised, and the diagnosis is confirmed on clinical examination like for hemangioma or after histopathological examination. Fibroepithelial polyp of prepuce differ from conventional cutaneous fibroepithelial polyp (also known as a skin tag, soft fibroma, fibroma molle, and fibroma pendulans) by being larger. There is prominent stromal edema, vascular dilatation and greater stromal cellularity. Skin tags are usually less than 5 mm in size and they commonly occur over axilla, neck, and eyelid.

Fibroepithelial polyps of the glans penis are extremely rare, and they might be congenital. Local recurrence or malignant transformation may develop after excision, hence, follow up is necessary. Cosmetic appearance for completely excised lesion is good.

Acknowledgements

The author(s) declare that they have no competing interests and financial support.

References

1. Schwartz SL, Perkins PL, Ritchey ML. Angiocentric myofibroblastic tumor of the penis in a child: Case report and literature review. *J Urol*. 1993;149(5):1114-5.
2. Fetsch JF, Davis CJ Jr, Hallman JR, Chung LS, Lupton GP, Sesterhenn IA. Lymphedematous fibroepithelial polyps of the glans penis and prepuce: A clinicopathologic study of 7 cases demonstrating a strong association with

- chronic condom catheter use. *Hum Pathol.* 2004;35(2):190-5.
3. Turgut M, Yenilmez A, Can C, Bildirici K, Erkul A, Ozyürek Y. Fibroepithelial polyp of glans penis. *Urology.* 2005; 65(3):593.
 4. Williams TR, Wagner BJ, Corse WR, et al. Fibroepithelial polyps of the urinary tract. *Abdom Imaging.* 2002;27(2):217–21.
 5. Kampantais S, Gourvas V, Lymperi S, Toutziaris C, Ioannidis S. Malignant degeneration within a fibroepithelial polyp of the glans penis: A case report and literature review. *Clin Genitourin Cancer.* 2013;11(1):63-5.
 6. Şencan A, Şencan A, Günşar C, Çayirli H, Neşe N. A rare cause of glans penis masses in childhood: Fibroepithelial polyp. *J Indian Assoc Pediatr Surg.* 2015;20(1):42-4.
 7. Yildirim I, Irkilata C, Sumer F, Aydur E, Ozcan A, Dayanc M. Fibroepithelial polyp originating from the glans penis in a child. *Int J Urol.* 2004;11(3):187-8.
 8. Tsai TF, Hung CS, Hsiao CH. Fibroepithelial polyp of glans penis in a man who practiced genital hanging kung fu. *J Am Acad Dermatol.* 2008;59(2 Suppl 1):S35-7.
 9. Kim YD, Lee MH, Kim JM, Koh ES. Giant fibroepithelial polyp of the glans penis. *Korean J Urol.* 2009;6:619-21.
 10. Agir H, Sen C, Cek D. Squamous cell carcinoma arising from a fibroepithelial polyp. *Ann Plast Surg.* 2005;55(6):687-8.

Access this article online

<http://pediatricurologycasereports.com>

Quick Response Code

