Parameatal glans cyst: A case report

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ABSTRACT

Parameatal glans cyst is unusual and only a few cases reported until currently. We presented a four-year-old boy with dysuria and inappropriate appearance of parameatal glans cyst. The cystic mass was slow-growing and was present since birth. Complete surgical excision was performed to prevent recurrences and to achieve good cosmesis.

1. Introduction

Parameatal glans cyst is very rare entity and was first reported in 1956 by Lantin and Thompson. These lesions are benign and usually occur in boys, even though they can be seen in infants and adults. The aetiology and pathogenesis of these cysts are undetermined. The growth commonly asymptomatic. However, patient may experiences urinary problems including urinary retention and dysuria. We presented a case of parameatal glans cyst in a 4 year old boy with dysuria and unacceptable appearance of the lesion.

2. Case presentation

A 4-year-old boy brought by the parents to the urology clinic reporting a slow-growing, painless, cystic mass on the glans penis which was exist since childbirth. The symptoms related to the lesion were slight dysuria as well as cosmetically inappropriate. Physical examination revealed a globular cystic swelling with a diameter around 0.5 cm over the glans next to the urethral meatus. General clinical was otherwise normal and urine examination was unremarkable. The excision of the cyst was performed under general anaesthesia and total removal of the lining of the cyst was obtained. Following surgical procedure, acceptable cosmetic outcomes were achieved without urinary issues (Fig. 1). Microscopically, pathologist reported a stratified squamous epithelium with cysts in the subepithelial layer. In addition, the cysts also lined with simple cuboidal epithelium (Fig. 2).

3. Discussion

Parameatal glans cysts are commonly benign and are very rare entity. Many terms had been used to describe parameatal glans cyst such as parameatal urethral cyst, penile mucus cyst and hidrocystoma. The pathogenesis of parameatal glans cysts are uncertain. However, previous studies ascribed the emergence of parameatal glans cyst to several process including the loss of adhesion of foreskin from glans and obstruction of paraurethral duct. In addition, Hill et al. reported the formation of cysts may be due to infection as a result of occlusion of paraurethral duct.

The location and size of parameatal glans cysts were varied, commonly they occur on lateral or ventral side of meatal glans and usually of approximately 1 cm in size. The cysts can appear on any age and they also may present at birth. Even though these lesions were asymptomatic, patients with this disease may seek medical attention due to urinary issues, including urinary flow disturbance, dysuria, urinary retention as well as unacceptable cosmesis. In this report, the parameatal glans cyst was about 0.5 cm in diameter and was present since birth. Therefore, the cyst considered as congenital entity.

The differential diagnosis of parameatal glans cysts including epidermoid cyst, xanthogranuloma, fibroepithelial cyst, and pilosebaceous polyp. Various modalities have been described as possible managements to eradicate parameatal glans cyst, such as aspiration, marsupialisation and surgical cyst excision. However, only complete surgical excision provides better outcome both on recurrencies and cosmesis results. Hence, the surgical cyst excision approach was
4. Conclusions

A parameatal glans cyst is a benign, very rare condition, and usually asymptomatic. Physical examination is adequate to make the diagnosis of parameatal glans cyst. Surgical cyst excision is suggested to perform in order to prevent recurrences and to obtain a satisfactory cosmesis.

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Fig. 1. Clinical appearance of parameatal glans cyst (A: pre-operative; B: 1 month post-operative).

Fig. 2. Microscopic appearance of the specimen (H&E, A: X 100; B: X 400).