

Case Report

Congenital Cyst of the Prepuce in the Context of Phimosis: A Case Report from a Rural Setting at the Koutiala Referral Health Centre

Ballo B^{1*}, Dembélé O², Traoré SI², Koné O³, Ongoiba S³, Traoré S¹, Dembé A¹, Kassogué S¹, Kanthé D³, Fomba D³, Dramé BM⁴, Mallé K⁵, Singuepiré.A⁴, Diarra T³, Samaké B⁴, Diakitè ML⁵

¹Koutiala Referral Health Centre, Urology Department, Mali

²Sikasso Hospital, Urology Department, Mali

³Markala Referral Health Centre, Urology, Mali

⁴Nianankoro Fomba Hospital In Ségou, Mali

⁵Point-G University Hospital Centre, Mali

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Abstract: Congenital cyst of the prepuce in tight phimosis is a rare condition, of which we have found no cases in the literature. The case we report concerns an 8-year-old patient with a large cyst measuring 5 cm long and 3 cm short that had been developing for six years and a very tight phimosis. The clinic was dominated by urinary problems such as burning miction, dysuria, deformation of the penis by the fluctuating penopreputial mass and psychological trauma affecting the parents, who decided to consult for better treatment. After an operative assessment, the patient was scheduled for surgery, which consisted of a cystectomy combined with circumcision, with simple immediate and long-term after-effects.

Key words: Circumcision, foreskin, cyst, urology, rural environment, Koutiala, Mali.

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INTRODUCTION

The foreskin is a fold of skin that forms a sleeve around the glans. It comprises a cutaneous surface which continues with the skin of the penis, a mucous surface which moulds itself to the glans and adheres to it by a median fold called the frenulum. It is bounded at the back by the balanopreputial sulcus and at the front by a free circumference called the preputial orifice. Structurally, the prepuce comprises a muscular envelope (peripenile muscle), skin and a very loose cellular envelope with no fat.

Phimosis is a fibrous stenosis of the preputial ring. This makes unhooding difficult, painful or even impossible. The diagnosis is made when the preputial orifice is narrowed and the foreskin cannot be rolled up behind the glans. Congenital foreskin cysts are tumours of the foreskin that can be benign or malignant according to Beau's classification [2]. The cyst may become superinfected, affecting the aesthetic and functional prognosis of the penis. The aim of this work is to report the clinical and therapeutic aspect of a

congenital cyst of the prepuce on serous phimosis in an 8-year-old child.

OBSERVATIONS

Patient A.G., aged 8, resident in Mahou, 3ème, one of five siblings in year 2 ème, with no particular pathological history, consulted for dysuria, urinary burning and a sensation of a preputial mass. Physical examination revealed a phimosis with a tight orifice at the origin of the dysuria, the onset of which would date back about six months, and a mobile penopreputial mass (Figure 1) of soft consistency, painless, measuring about 5 cm long and 3 cm short, of abrupt onset, which had been evolving for 6 years. The penis, bursa and testicles are unremarkable. Ultrasound showed a simple cyst with squinting fluid content; the rest of the urogenital tract was normal. Cysto-bacteriological examination of the urine could not be carried out due to lack of availability in our facility. A pre-operative check-up was requested, including a haemogram, blood group (the child was group B and rhesus positive), prothrombin level and creatinemia were normal.

After 7 days' antibiotic prophylaxis with beta-lactam, the patient was presented to the anaesthetists for programming. The patient was scheduled and operated on under general anaesthetic. We performed a cystectomy plus circumcision (figure 2). After incision and dissection of the various planes, exploration revealed the glans penis, which had been compressed by the preputial ring, and a penopreputial cyst. We performed a cystectomy, decalcification and circumcision, with haemostasis using crimped Vicryl 2/0. The post-operative course was straightforward, with the sutures removed on the 13th dayème (figures 3 and 4). Pathological examination of the surgical specimen was consistent with an epidermoid cyst of the prepuce with squamous epithelium at the base. Three-month follow-up was normal: urinary and aesthetic comfort was satisfactory.



Figure 1: An 8-year-old child with a congenital cyst of the prepuce on a tight phimosis



Figure 2: Dissection of the cyst (cystectomy)



Figure 3: Cystectomy and circumcision parts



Figure 4: Appearance of glans after circumcision and cystectomy

COMMENTS

Congenital cysts of the prepuce complicated by phimosis are rare. Elebute, *et al.*, reported a case of preputial cyst in a newborn delivered by caesarean section for foetal distress at 40 weeks' amenorrhoea [13]. Congenital cysts of the prepuce may be sebaceous, dermoid or mucoid cysts occurring in the context of circumcision or phimosis. In our case, it was a congenital preputial cyst on tight phimosis. The clinical picture was dominated by urinary problems such as burning miction, dysuria, deformation of the penis by the fluctuating penopreputial mass and psychological trauma affecting the parents. Ultrasound confirmed a simple cyst of the prepuce. Cystectomy, respecting the skin and mucosa, and circumcision were indicated, and the post-operative course was simple, with satisfactory urinary and aesthetic comfort.

In Mali, Diallo *et al.*, reported a case of post-circumcision preputial cyst in a 24-year-old man in 2018 at Sikasso hospital, which is different from our case [12]. Our case differs from Louis HARDY's thesis

entitled: Clinical and therapeutic study of prepuce tumours in Paris and that of Lannelongue and Achard who reported a case of congenital dermoid cyst [1, 3]. Hence the need for us to share this work with the scientific community, given the importance and rarity of this case.

CONCLUSION

Congenital cysts of the prepuce are very rare. The taboo nature of genital pathologies in our context contributes to the delay in its management. Diagnosis is clinical and often supplemented by ultrasound. Treatment is always surgical, with cystectomy and circumcision to achieve good functional and aesthetic results.

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