ONLINE EXCLUSIVE

Congenital buried penis – an extremely rare entity

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Congenital non-visualisation of penis is a rare form of buried penis. It affects the functional and psychological behaviour of the affected child. Most of the cases in literature are secondary in nature like post circumcision, post trauma and due to recurrent balanitis. Here we discuss the mode of presentation and management of a congenital buried penis in an 11-year-old boy.

In 1919, Keyes first reported buried penis as "the apparent absence of the penis" [1]. In 1951, Campbell explained that buried penis may lie beneath the subcutaneous fat of the hypogastrium, scrotum, perineum and thigh [2]. Crawford classified buried penis into three types (concealed penis, buried penis (partial or complete) and penoscrotal webs) and their correction based on the type of presentation [3]. Maizels et al. classified the condition into four types, based on the concealment of the penis: buried penis, webbed penis, trapped penis and micropenis [4]. When buried penis is due to flabby skin and abnormal attachments it usually requires surgical correction as was done in our case.

Case report

An 11-year-old male came to our institution with complaints of non-visualisation of penis and intermittent difficulty in urination since birth. There was no previous history of any surgery and injury. On inspection, the penis and urinary meatus were not visualised (Figure 1). On palpation, the phallus could be palpated and was completely hidden under the prepuce. Both the testis were normally present in the scrotum.

Routine investigations were within normal limits. Ultrasonography of the kidney, ureter and bladder region did not reveal any abnormality. Surgical correction was then planned.

The child was taken up for surgery and after placement of an 8Fr catheter, circumferential sub coronal incision was made with degloving of the penis up to the base (Figure 2). Then re-establishment of the penopubic and penoscrotal angle was done. Penile skin and dartos were sutured in circumferential fashion.

Postoperatively, the wound was healthy without any bleeding, discharge or discolouration of the skin (Figure 3) and the patient was discharged by postoperative day four and advised regular follow-up. On follow up after two weeks the penis was straight and well visualised.

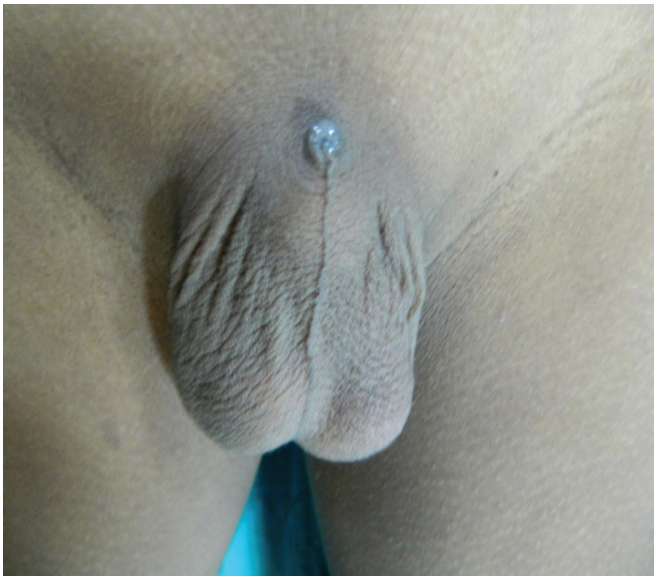

Figure 1.

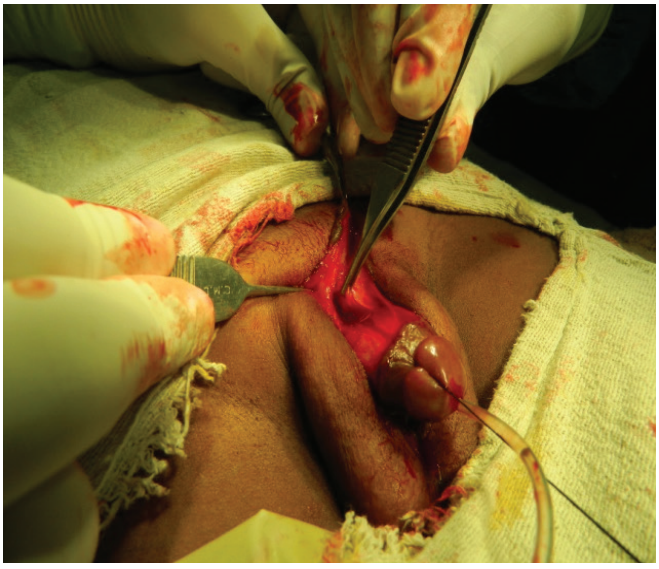

Figure 2.

Discussion

Buried penis is an extremely rare entity in which the penile shaft is partly or completely masked by preputial skin. Buried penis can be congenital, as was in our case, or may develop in later life. Infants and preschool children are more commonly affected than adults [5]. In our case the patient presented late as his parents were illiterate and financially vulnerable.

The most common cause of buried penis is congenital, when the skin of penis and dartos is aberrantly attached to the deep (Buck's) fascia of penis [6]. Other causes are class III obesity, lymphedema, paucity of ventral penile shaft skin and atypical displacement of penis ventrally. In adults, it is usually a result of neonatal circumcision causing cicatrix later in life.

In our case, it was a congenital defect which was brought late to our institute and the patient had difficulty in urinating while standing, or even squatting, without wetting his scrotal skin, thigh or clothes.

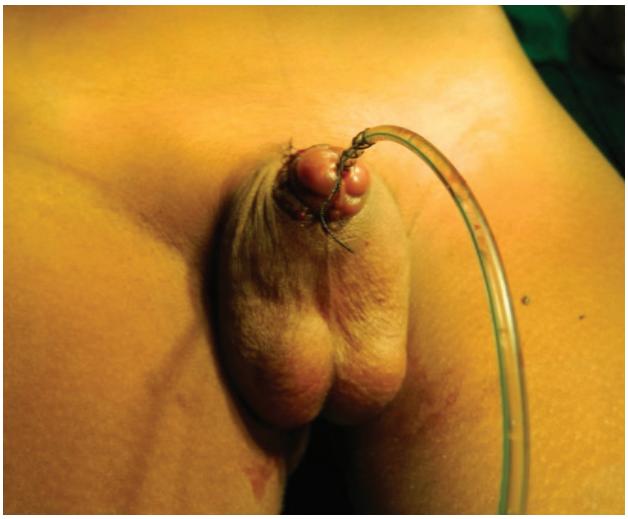

Figure 3.

Buried penis is usually associated with physical and psychiatric problems but our patient did not appear to have any psychological issues. Other common problems encountered include:

- Urinary tract infections and skin lesions due to wet external genitalia.
- In uncircumcised children, preputial skin may become erythematous and swollen.
- Patients may have painful erections, but our patient didn't complain about such issues.
- Common psychological issues seen in congenital penis are depression and inferiority complex.

Buried penis can be surgically challenging to deal with and management depends on the underlying cause. Occasionally this condition resolves spontaneously in children, but if it does not surgical correction is needed [7].

Penoplasty is degloving of the penis followed by dorsal skin cover and is presently accepted as the most appropriate procedure [8]. This was the procedure done in our patient. Alternative techniques for surgical correction mentioned include excision of scar tissue, release of ligament connecting base of penis to pubis, panniculectomy and escutheonectomy [9].

Patients affected with buried penis may also require:

- Medical management: buried penis associated with infection in the genital region is treated symptomatically. No such medication was needed in our case.
- Psychological counselling: experts may be needed to address the depression, low self-esteem and sexual dysfunction. Our patient fortunately was psychologically well.

Conclusion

To conclude, buried penis is a sexually and psychologically embarrassing condition which can be corrected by surgical repair. It should be repaired as soon as possible to avoid physical or psychological sequelae.

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