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Some technical contributions to the treatment of buried penis

L.G. Freitas Filho^{a,*}, A.A.M. Tonel^b, B.S.M. Medeiros^b, T.R.G. Paiva^b, M.C.G. Abreu^b

^a Universidade Federal de São Paulo, Consultant of Urology, Hospital Santa Marcelina, Department of Pediatric Surgery, Brazil
^b Department of Pediatric Surgery, Hospital Santa Marcelina, Brazil

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ABSTRACT

Buried penis is a rare condition in which the preputial skin and the fat in the hypogastric area cause the body of the organ to be involved in such a way as to convey the impression that the patient has a micro penis. We present a few technical contributions to the surgical treatment of buried penis, suggesting modifications that may be of help in the treatment of those patients.

1. Introduction

Buried penis is a rare condition in which the preputial skin and the fat in the hypogastric area cause the body of the organ to be involved in such a way as to convey the impression that the patient has a micro penis. The condition, described in 1977, by Crawford,¹ may sometimes be found at birth, although it may also appear at a later time.² Almost inevitably, the condition if not duly treated may give rise to a psychological issue, although as a rule, it can be conveniently treated through surgical intervention. There is, however, controversy regarding surgical treatment before puberty as in some cases the penis grows and intervention may not be necessary. In the case of our patient the family insisted that the operation be performed.

We present a few technical contributions to the surgical treatment of buried penis, suggesting alterations that may be of help in the treatment of those patients.

2. Materials and methods

A child, born in 2012, whose parents are first cousins. From birth, he presented a small penis. In 2017 he underwent circumcision and the penis continued involved by the adjacent fat (Fig. 1). Following the decision of a new surgical intervention, the child underwent a hormone treatment with 1% Testosterone Propionate as a cream of local application on the external genitals for a one-month period.

2.1. Surgical technique

- 1. Two flaps marked with a surgical pen, with lateral pedicles, extending to the base of the penis and to the base of the testicular pouch (Fig. 2).
- 2. Incision in the transition between the preputial skin and the mucosa.
- 3. Dissection and exposure of the entire body of the penis, ungloving it and separating the entire cutaneous coverage that in most cases keeps the penis buried (Fig. 2).
- 4. Resection of the entire fatty tissue found in the flaps, of the fatty tissue that involves the spermatic cord as well as of the fat in the hypogastric area (Fig. 3)
- 5. Resection of the entire dartos fascia of the penis, considering that it loses all of its $elasticity^2$ (Fig. 2).
- 6. Suture of the lateral flaps so as to recover the entire body of the penis. The skin in the dorsal area of the penis must be sutured to the tunica albuginea, at mid-point of the body of the penis that is the region of least vascularization and innervation (Fig. 3).
- 7. Possible fixation of the testes, when necessary.
- 8. Suture of the subcutaneous tissue and of the skin in the space created by the lateral flaps (Fig. 3).
- 9. Placing of a proper silicone tube to drain the urine.
- 10. Placing of an aspiration drainage tube in the subcutaneous space of the hypogastric area (Fig. 3).

Details: Careful hemostasis of the entire procedure is required in particular to lessen a possible lymphatic fluid overflow. Withdrawal of

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^{*} Corresponding author. Rua Batista Cepelos 87 – ap 61, 04109-120, São Paulo, Brazil.

E-mail addresses: luizfreitasepm@gmail.com, luiz.freitas@unifesp.br (L.G. Freitas Filho), alexandretonel@hotmail.com (A.A.M. Tonel), babii.sephane@gmail.com (B.S.M. Medeiros), taynaragpaiva@gmail.com (T.R.G. Paiva), cristinagabreu@uol.com.br (M.C.G. Abreu).

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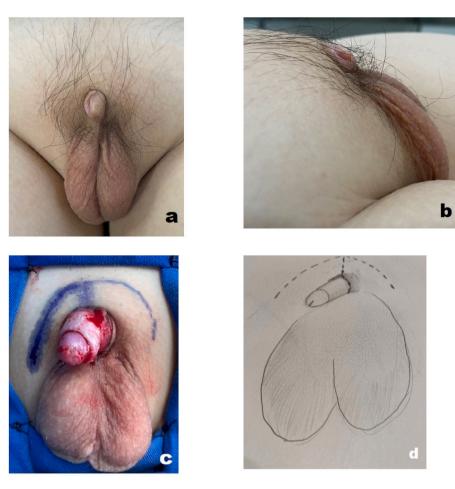


Fig. 1. a and b. Preoperative appearance of the buried penis. c and d Lateral flaps after ungloving the shaft of the penis.

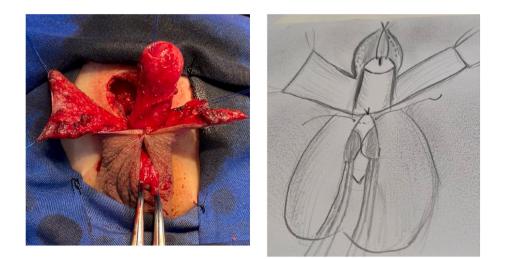


Fig. 2. Suture of the lateral flaps involving the penis after resection of dartos fascia.

the dartos fascia aims to improve the lateral flaps fixation to the tunica albuginea. The lateral flaps ought to be fixed to the albuginea tunica in order to keep the body of the penis elongated. The dressing must be compressive and as a result, the urethral silicone tube in order to drain the urine must be kept for no less than a week. The aspiration tube must not be withdrawn until the output comes to practically zero.

2.2. Comment

The term "buried penis" has been used in cases of patients with an apparently small "phallus" as a result of a circumcision, many times unnecessary, or owing to the large volume of fat in the hypogastric area that causes it to sink despite its normal size.

Our patient had an exuberant fatty tissue in the hypogastric area while at the same time, having undergone a probably unnecessary

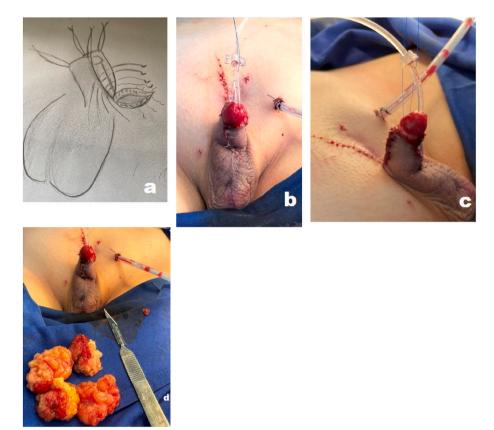


Fig. 3. a, b, and c Outcome of the intervention. d Fat removed from the hypogastric area.

circumcision that kept the buried penis aspect, according to the family.

Our technique uses principles of previous techniques, however adding a few aspects that seem to us important such as the use of two laterally positioned flaps that lead the body of the penis to a more posterior position, causing the entire organ to be fully exposed.^{3,4} Withdrawal of the dartos fascia that in these cases keeps the penis buried, facilitates fixation of the body of the organ to the laterally positioned flaps, with a quite good outcome from the esthetic point of view (Fig. 3).

This is a contribution to the already existing techniques, however, with a few details that may improve the final result.

3. Conclusion

By describing this case we presented a few contributions to the already known techniques for the treatment of buried penis. The outcome was quite satisfactory, however more patients must undergo the new technique before we are able to assess such findings more properly.

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