

## Original Research Article

## The Buried Penis with Phimosis

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**Abstract:** The “buried penis” is the common name given to a rather infrequent congenital penile malformation that may present different aspects. Functionally normal and generally of normal size, the buried penis, by its concealment within the fat and the pubic and penile scrotal skin, may cause great anxiety to the Parents, as it may also do, in later life, to the Patient himself. We present a typical Patient with a buried penis associated with marked phimosis, to demonstrate 2 techniques: one to correct the sunk and hidden penis, and the other to correct the phimosis, with the mesh graft principle, so avoiding sacrificing prepuce skin, what would be disastrous in such a Patient.

**Keywords:** Urogenital malformations, phimosis.

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### INTRODUCTION

Buried or hidden penis is the term used to refer to a relatively rare urogenital malformation of varied forms but usually associated with a penis of normal dimensions. In some cases the prepuce can have phimosis, leading to what some interpret as the mega prepuce resulting from the forced skin dilatation caused by the urine that after coming out from the urethral meatus finds it difficult to overcome a phimotic prepuce.

Although usually functionally normal, the buried penis is a motive for great anxiety for the Parents and, if not corrected early, latter on for the child itself (namely at adolescence, when they find that the penis is hidden under the fat and peno-scrotal skin, suggesting functional inadequacy and showing them different from their Peers.

According to some authors one of the more relevant causes of the buried penis is an abnormal and insufficient fixation of the dartos and penile skin, to the fascia of Buck, apart from marked variations in the volume of the pubic fat and skin.

### MATERIAL AND METHODS

A Patient suffering from one of the forms of the buried penis associated with marked phimosis serves to show the 2 methods used to correct the problem of the phimosis and of the concealed penis

(care being taken to preserve the preputial skin, generally already scarce.



**Fig-1: Buried penis, with the penile and preputial skin funnel shaped**

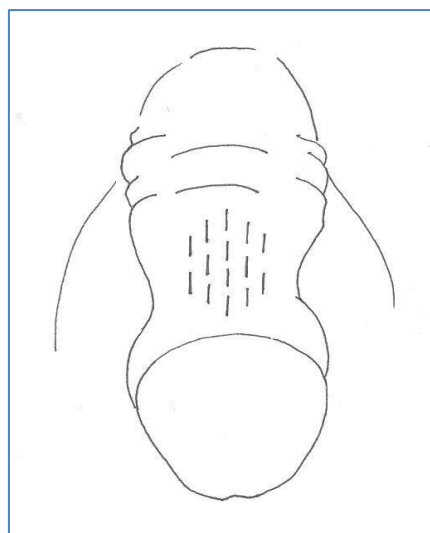


**Fig-2: Phimosis to be reversed**

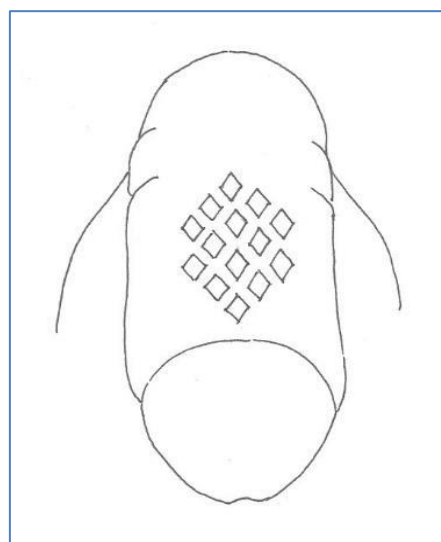
**Surgical Technique**

1<sup>st</sup> Technique: Drawing with demographic ink of a skin triangle at the base of the peno-scrotal junction, whose base should have a length that equals the skin perimeter at the level of the glans, followed by excision of that redundant part of the ventral penile skin. This skin wound is sutured in 2 planes and, at the base of the penis; the dartos is sutured to the fascia of Buck (and even to the albuginea). In those sutures slow reabsorption material is used. At this point the penis will have reacquired the appearance of an exteriorized cylinder. The peno-scrotal skin is sutured with rapid absorption material.

2<sup>nd</sup> Technique: This technique, used for the correction of the phimosis, is inspired by the mesh graft technique used in plastic surgery, namely in burns, when there is not enough skin available for grafting. Starting at the most stenosed area several small (approx 4mm) non matched superficial incisions of the skin and dartos incisions are performed all around, until one reaches complete disappearance of the constriction, the skin remaining with multiple small open diamond wounds. One tries to avoid damaging the dartos vessels but, if needed, electrocoagulation is used. In order to avoid re-stenosing of the prepuce the penile skin immediately behind the open diamond wounds is sutured to the pubo-scrotal skin to be maintained retracted at least the minimum of 5 days, to allow for complete healing (epithelialization) of the raw surfaces.



**Fig-3: Schematic appearance of the incisions used in the mesh graft technique for the Correction of phimosis**



**Fig-4: Schematic already opened" incisions**



**Fig-5: Ventral incision for the correction of the buried penis and mesh graft technique to correct the phimosis**



**Fig-6: Sometime after operation, still will some edema but, nevertheless, still allowing the advisable daily preputial retraction**

## DISCUSSION AND RESULTS

In these cases of buried penis with phimosis it is essential to preserve as much skin as possible (the prepuce). We disagree with the ones that use the inner skin of the prepuce because that may entail shortening of the penile skin during erection.

The ventral peno scrotal suture shows a good peno-scrotal angle there is of a skin cylinder all along the penile shaft, with skin redundancy.

In the 2<sup>nd</sup> part of the technique (which we use routinely in the correction of phimosis if the patient (or normally the parents) wishes to preserve the prepuce) it is important to explain to the Parents that local preputial edema may persist for a long time (simulating a non-existing para-phimosis) but that ultimately will subside, (although at times lasting a long time.....). In spite of the sutures placed between penile skin and the peno-scrotal junction it is important to alert the Parents to daily verify the preputial retraction and if needed to do it, even manually, for the minimal time to allow for total epithelialization of the open diamond wounds.



**Fig-7: Phimosis and buried penis corrected**

The results are excellent, as they can be observed in last figure, pleasing the Child and the Parents, with no postoperative complications.

## CONCLUSIONS

As far as the vast majority of the buried penis malformation is concerned the technique is simple and effective, bringing peace to the Parents and the children, particularly worried with the apparent small size of the penis.

The mesh graft technique for the treatment of phimosis allows for the integral maintenance of the preputial skin which is particularly important in this case. On the other end there will not be any functional problems in the future.

### Compliance with Ethical Standards

**Funding:** No funding was received

**Conflict of Interest:** No conflict of interest

**Ethical approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Ethical approval:** This article is not a study

**Informed consent:** Informed consent was obtained from all individual participants included in the study. No patient can be identified

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