

A Successful Reconstruction of Iatrogenic Buried Penis due to Repeated Circumcision with full Thickness Hairless Skin Graft

Khurshid Malik Hossain Tawhid¹, Md Mashfiqur Rahman Khan², Rabiul Alam Sharker³,
Md. Sumsuzzaman⁴, Taj Uddin Ahmed⁵, Nazem Ahmed⁶

¹Consultant Urology, KPJ Specialized Hospital, Gazipur, Dhaka. ²Consultant Anaesthesia, KPJ Specialized Hospital, Gazipur, Dhaka, ³Medical Officer, KPJ Specialized Hospital, Gazipur, Dhaka. ⁴Assistant Professor, Dept of Anaesthesia Analgesia and intensive care medicine, BMU; ⁵Assistant Professor, Dept of Anaesthesia Analgesia and intensive care medicine, BMU; ⁶Assistant Professor, Dept of Anaesthesia and ICU, NITOR; Dhaka.

Corresponding Author: Dr. Khurshid Malik Hossain Tawhid, Email: tawhidkmh@gmail.com

Abstract

Iatrogenic buried penis is an uncommon but distressing complication that may occur following circumcision, particularly when performed by untrained practitioners. It results in concealment or shortening of the penis due to cicatricial or anatomical factors. A 10-year-old boy from Jamalpur presented with complaints of apparent penile shortening following two previous circumcisions - the first performed by a traditional practitioner (hajam) and the second at a government hospital. On examination, an iatrogenic buried penis was diagnosed. A full-thickness, hairless skin graft harvested from the right upper thigh was grafted to cover the entire penile shaft. The postoperative period was uneventful, and the patient was discharged on the 5th postoperative day.

Keywords: Circumcision, Full thickness skin graft, reconstructive surgical procedure, Penile skin shortening, Iatrogenic complications, buried penis.

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Introduction:

Over-resection of penile shaft skin during circumcision can cause skin deficiency, retraction, and buried penis. Recognition of pre-existing concealed penis before circumcision is essential to avoid such iatrogenic complications.¹ Circumcision performed by untrained practitioners increases the risk of postoperative deformities and penile concealment.² Acquired buried penis in children often results from excessive skin removal during circumcision, postoperative scarring, or abnormal fascial tethering.³ Clinical manifestations include apparent penile shortening, difficulty in micturition, poor hygiene, recurrent balanitis, and psychological distress.⁴ Full-thickness skin grafts (FTSG) provide durable coverage required during sexual intercourse, minimal contraction, and good color/texture match, making them ideal for single stage penile reconstruction where mobility and elasticity are required.⁵ A case with excessive

resection of the penile skin and reconstruction with the full thickness skin graft is discussed.

Case Report:

A 10-year-old boy from Jamalpur presented with complaints of penile shortening. He had a history of two circumcisions — the first performed by a traditional practitioner (hajam), and the second in a government hospital.

On examination, an iatrogenic buried penis was noted. The patient and his guardians were properly counselled, and he was admitted to KPJ Hospital for surgical correction.

Operative Findings and Procedure

Under general anesthesia, a circumferential incision was made at the level of the corona. Only the glans penis and corona were visible beyond the skin of pubis. A 3/0 Prolene suture was placed on the glans penis to provide traction. Complete

degloving and mobilization of the penile shaft were performed. The suspensory (penopubic) ligament was incised, allowing full release of the penis.

After adequate traction and artificial erection (using saline), the penile length was found to be approximately **3 cm** from the pubic symphysis to the tip of the glans. The dartos fascia was fixed to the subcutaneous tissue at the level of the symphysis pubis at the **6, 12, 3, and 9** o'clock positions to prevent retraction.

The penile surface area was measured using a sterile paper template and a metallic scale. A full-

thickness, hairless skin graft was harvested from the right upper thigh just below the inguinal region and was grafted over the entire penile shaft. The graft was secured with **3/0** monofilament sutures (cutting needle). A sterile "daisy" dressing with minimal pressure was applied, and a **10Fr** silicone catheter was inserted.

The donor site was closed with **2/0** and **3/0** cutting sutures and dressed with sterile dressing.

Postoperative Course

The postoperative period was uneventful, and the patient was discharged on the 5th postoperative day.



Figure (A,B): A- full thickness skin graft from upper thigh; B- Initial stage of suturing graft over penis.



Figure (C,D) : Fixation of graft over dorsal & ventral surface of penis.

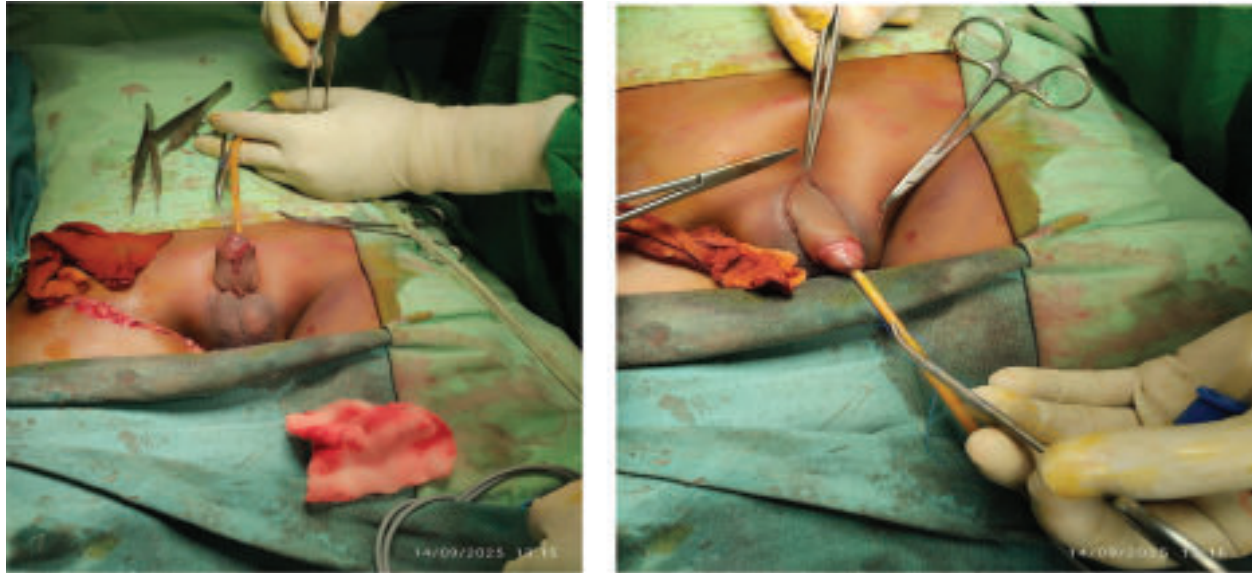


Figure (E,F): Post fixation status.

Discussion:

The goal of the treatment, after extensive loss of the penile skin, is to achieve good cosmetic appearance of the penis and restoring adequate sexual function. Multistage operations with a significant time delay can lead to secondary sexual dysfunction due to psychological phenomena so, less aggressive approach performed as a single act surgery is preferable.⁶

Non-hirsute FTSG should be harvested from thin, elastic areas. Donor site requires primary closure. Proper hemostasis and atraumatic handling preserve dermal vascularity, ensuring graft take⁷. Hairless donor skin prevents postoperative hair growth on the penile shaft, which can cause irritation, hygiene issues, and poor cosmetic outcomes. Preferred sites are the inner thigh, groin crease, or lower abdomen⁸. The penis should be completely degloved, with release of dartos fascia and suspensory ligaments to prevent tethering. Adequate hemostasis and a well-vascularized bed are essential for graft survival⁹. The graft should be secured with fine monofilament sutures, tie-over or “daisy” dressings to prevent hematoma. Catheterization and immobilization for several days support graft adherence¹⁰.

Conclusion:

This case highlights the importance of proper surgical technique during circumcision and demonstrates successful reconstruction of an iatrogenic buried penis using full-thickness skin grafting. Early recognition and appropriate surgical management are essential to achieve satisfactory functional and cosmetic outcomes.

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