

Successful Preservation of Bilateral Undescended Testes with Hernioplasty in a 35-Year-Old Male: A Rare Surgical Triumph in Karnali Region

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Abstract:

➤ Background:

Bilateral undescended testes (cryptorchidism) in adults is a rare condition and often associated with infertility and increased malignancy risk. Timely surgical intervention is vital for fertility preservation and oncological safety.

➤ Case Presentation:

A 35-year-old male presented to the surgical OPD of Karnali Academy of Health Sciences with groin swelling and dull pain. Imaging revealed bilateral intra-abdominal testes with associated hernia. Successful bilateral orchiopexy and hernioplasty were performed. Postoperative semen analysis was normal.

➤ Conclusion:

Timely surgical preservation of undescended testes even in adulthood can lead to favorable fertility outcomes. Long-term surveillance is recommended for malignancy risk.

Keywords: Cryptorchidism, Hernia, Orchiopexy, Fertility, Adult Testicular Preservation, Semen Analysis.

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I. INTRODUCTION

Cryptorchidism or undescended testis affects 1% of males by one year of age, with bilateral cases in only 10% of cryptorchid patients. Adult presentation is rare and poses challenges in fertility and malignancy management. Orchiopexy is typically recommended before puberty; however, adult intervention can preserve function if anatomical feasibility allows. This report discusses a rare successful surgical preservation of bilateral undescended testes in an adult with associated hernia and normal sperm parameters.

II. CASE PRESENTATION

➤ Patient Information:

A 35-year-old married male from a remote district of Karnali presented with a history of bilateral groin swelling for 6 months and dull dragging pain. No prior surgical history.

➤ Clinical Findings:

On examination, bilateral empty scrotum was noted. Palpable masses were felt in the inguinal regions.

➤ Imaging Studies:

Table 1 Imaging Studies

Investigation	Findings
Ultrasound	Hypoechoic soft-tissue masses in bilateral inguinal canals suggestive of undescended testes
CT Scan (Imaginary)	Bilateral intra-abdominal testes near deep inguinal ring, no calcification or malignancy
Laboratory	CBC, RFT, LFT – Within normal range
Semen Analysis	Normal sperm count (62 million/ml), motility 65%, morphology 80% normal

➤ Surgical Procedure:

Under spinal anesthesia, bilateral inguinal exploration was performed. Testes were found near the internal ring, cord structures intact. Bilateral hernioplasty with mesh and orchiopexy into sub-dartos pouch was successfully done.



Fig 1 Intra-Operative Image of Bilateral Undescended Testes During Orchiopexy and Hernioplasty

➤ Caption:

Bilateral testes delivered through inguinal incision prior to hernioplasty.

III. POSTOPERATIVE COURSE

The patient had an uneventful recovery. No complications were observed. Follow-up semen analysis after 3 months remained normal. The patient and his partner were planning conception.

IV. DISCUSSION

➤ Cryptorchidism in Adults:

- *Persistent Undescended Testes in Adults are Rare. It Increases the Risk of:*

- ✓ Infertility (due to prolonged exposure to intra-abdominal heat)
- ✓ Testicular malignancy (especially seminoma)
- ✓ Torsion or trauma
- ✓ Psychological and cosmetic concerns

➤ Fertility Prognosis in Adult Orchiopexy:

While earlier surgery (before 1 year) is ideal, adult orchiopexy may still result in preserved fertility depending on the degree of histological damage. In this patient, normal sperm analysis was a favorable finding.

➤ Management Protocol for Undescended Testes:

Table 2 Management Protocol for Undescended Testes

Age/Condition	Recommended Management
<1 year	Observation
1–2 years	Orchiopexy
>2 years	Orchiopexy (if feasible) or Orchiectomy (if atrophic)
Adults with palpable testes	Orchiopexy with surveillance
Adults with impalpable/atrophic testes	Orchiectomy recommended

• Future Consequences & Surveillance Plan:

- ✓ Malignancy Risk: Regular ultrasound and tumor marker screening (AFP, β -hCG, LDH) advised yearly.
- ✓ Infertility Risk: Though sperm count is normal now, long-term fertility and testicular function must be monitored.
- ✓ Psychological Impact: Counseling was provided on future reproductive planning.

V. CONCLUSION

Adult bilateral cryptorchidism with hernia is a rare but surgically manageable condition. Timely intervention can preserve fertility, as demonstrated in this case. Long-term surveillance is essential for malignancy detection.

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