

PD 46-05 Understanding the Need for Reoperation After Surgical Repair of Adult Acquired Buried Penis

Skokan AJ¹, Stewart A¹, Wingate JT¹, Hwang C¹, Loftus C¹,
Wessells H¹, Friedrich J², Hagedorn JC¹

¹Department of Urology, University of Washington, Seattle, WA

²Division of Plastic Surgery, Department of Surgery, University of Washington, Seattle, WA

Introduction

- > **Adult acquired buried penis is a shared clinical endpoint resulting from any of several etiologies**
 - **Obesity/weight loss, lichen sclerosis, lymphedema, other inflammatory processes, iatrogenic/postsurgical**
- > **Surgical management aims to address impaired function from penile concealment**
 - **High risk surgical group with high incidence of complications, but excellent patient satisfaction**
- > **Surgery may not address underlying etiology, and single-stage treatment may not achieve functional goals in all patients**



Objectives

- > To study the patient-reported incidence of persistent or recurrent penile concealment after elective adult buried penis repair**
- > To identify candidate variables correlated with persistent/recurrent bother and potential need for elective reoperation**



Methods

- > **Retrospective review of all patients undergoing adult buried penis repair at one academic referral center**
 - 8/2013 – 8/2019
 - 4 reconstructive urologists, 2 collaborating plastic surgeons
- > **Inclusion criteria**
 - All adult patients who:
 - > 1) Had baseline exam findings supporting acquired buried penis, AND
 - > 2) Underwent surgical repair (1+ of: mons panniculectomy, debridement/grafting of penis/scrotum, scrotoplasty)
- > **Exclusion criteria**
 - Postop follow-up < 60 days
 - No elective surgical intervention



Results: Table 1a - Baseline Demographics

	N (%) or Mean / Median		
	Total (n=55)	No Postoperative Recurrence (n=40)	Recurrent / Persistent Bothers (n=15)
Age (years)	53.1 / 52.0	53.9 / 52.6	50.9 / 51.2
BMI	44.0 / 43.3	42.4 / 41.8	48.4 / 48.7
Circumcised	43 (78.2%)	32 (80.0%)	11 (73.3%)
History of Bariatric Surgery	12 (21.8%)	9 (22.5%)	3 (20.0%)
Diabetes	29 (52.7%)	23 (57.5%)	6 (40.0%)
Baseline Hemoglobin A1c (%)	7.0 / 6.9	7.0 / 6.9	7.0 / 7.1
Etiology			
Morbid Obesity	26 (47.3%)	21 (52.5%)	5 (33.3%)
Postsurgical	11 (20.0%)	8 (20.0%)	3 (20.0%)
Lichen Sclerosus	8 (14.5%)	4 (10.0%)	4 (26.7%)
Genital Lymphedema	5 (9.1%)	3 (7.5%)	2 (13.3%)
Other Inflammatory/Infectious	2 (3.6%)	2 (5.0%)	0
Other/Idiopathic	6 (10.9%)	5 (12.5%)	1 (6.7%)



Results: Table 1b - Perioperative Characteristics

	N (%) or Mean / Median		
	Total (n=55)	No Postoperative Recurrence (n=40)	Recurrent / Persistent Bothers (n=15)
Mons Panniculectomy/Escutcheonectomy	51 (92.7%)	38 (95.0%)	13 (86.7%)
Penile or Scrotal Skin Debridement/Graft	37 (67.3%)	27 (67.5%)	10 (66.7%)
Graft Size (cm²)	89 / 99	93 / 99	76 / 75
Scrotoplasty	20 (36.4%)	15 (37.5%)	5 (33.3%)
Complications			
Any Complication	17 (30.9%)	12 (30.0%)	5 (33.3%)
Wound Cellulitis	7 (12.7%)	7 (17.5%)	0
Wound Dehiscence	7 (12.7%)	5 (12.5%)	2 (13.3%)
Hematoma	2 (3.6%)	1 (2.5%)	1 (6.7%)
Abscess	3 (5.5%)	1 (2.5%)	2 (13.3%)
Wound Ulceration	1 (1.8%)	0	1 (6.7%)



Results

- > **15/55 patients (27%) undergoing buried penis repair had persistent or recurrent bother postoperatively over median 1.1 years follow-up**
 - **Attributed etiology of persistent or recurrent symptoms: lymphedema (7/15), residual skin/soft tissue (3/15), scarring (3/15), pannus recurrence/growth (2/15)**
 - **11/15 underwent revision surgery, satisfied with subsequent outcome**
- > **Preoperative BMI correlated with persistent/recurrent bother (p=0.031)**
- > **No significant correlation with:**
 - **Any other listed baseline patient demographics**
 - **Specific procedures performed, skin graft size (p=0.19), wound complications**



Limitations

- > **Single center study, small cohort**
- > **Retrospective series**
- > **Potential differences in technique between institutions**
 - **Unlikely, prior institutional reports have yielded outcomes comparable to other single-center series**



Conclusions

- > **Up to 1 in 4 patients undergoing surgical repair may not achieve their functional goals in a single operation**
 - May be more likely with severe obesity
 - Further evidence to support BMI-based surgical candidacy?
- > **Future studies should include multi-institutional cohorts to better understand the rate of revision surgeries long-term**
 - Further evaluate the relationship between BMI and success in achieving patient goals with a single-stage procedure

