2-2021

Changes in Patient Reported Outcome Measures After Treatment of Female Urethral Stricture

Alyssa Gracely

Giulia I. Lane

Pansy Uberoi

Una Lee

Ariana Smith

See next page for additional authors

Authors

Alyssa Gracely, Giulia I. Lane, Pansy Uberoi, Una Lee, Ariana Smith, and Priya Padmanabhan

formation. Presenting symptoms were; urethral discharge 37(92.5%), pelvic pain/bladder spasms 23(57.5%), acute infection/sepsis 12 (30%) and haematuria 1(2.5%). Aetiology for conduit and pyocystis is detailed in Table 1.

Prior bladder augmentation was a significant risk factor for the development of pyocystis. Pyocystis treatment and resolution rates are detailed in Table 2.

Conclusion: Pyocystis develops in 37.7% following ileal conduit formation. Previous bladder augmentation is a significant risk factor for its development. Conservative measures are successful in treating 40% of cases whilst simple cystectomy is required in 60%.

Table 1: Indication for conduit	All cases N=106 (%)	Pyocystis Cases N = 40 (%)
Complex UI	44 (41.5)	13 (32.5)
Neuropathic Bladder	22 (20.37)	13 (32.5)
BPS	12 (11.3)	4 (10)
VVF (post DXT)	11 (10.4)	2 (5)
Atonic bladder	10 (8.4)	6 (15)
Trauma and Radiotherapy	3 (2.8)	
Miscellaneous	4 (3.8)	2 (5)

Table 2: Treatment of pyocystis (N = 40)	Complete Resolution of Pyocystis N (%)
Cystectomy	24 (60)
Bladder washout	12 (30)
Conservative management with antibiotics	2 (5)
Urethral catheterisation to drain bladder	1 (2.5)
Cystodiathermy of bladder	1 (2.5)

Funding: N/A

#M47 | CHANGES IN PATIENT REPORTED OUTCOME MEASURES AFTER TREATMENT OF FEMALE URETHRAL STRICTURE

Alyssa Gracely[1], Giulia I. Lane[1], Pansy Uberoi[2], Una Lee[2], Ariana Smith[3], Jennifer Anger[4], Didi Theva[5], Jessica DeLong[6], Casey Kowalik[7], Priya Padmanabhan[8], Charles Powell[9], Maude Carmel[10], J. Quentin Clemens[1], Anne P. Cameron[1], Priyanka Gupta[1]

[1]Dept. of Urology, University of Michigan, Ann Arbor, MI, [2]Section of Urology and Renal Transplantation, Virginia Mason Medical Center, Seattle, WA, [3]Dept. of Urology, Penn Medicine, Philadelphia, PA, [4]Division of Urology, Cedars-Sinai Medical Center, Beverly Hills, CA, [5]Memorial Hospital Miramar, Miramar, FL, [6]Eastern Virginia Medical School, Norfolk, VA, [7]Kansas University Medical Center, Kansas City, KS, [8]Beaumont Hospital, Royal Oak, MI, [9]Indiana University, Indianapolis, IN, [10]University of Texas Southwestern Medical Center, Dallas, TX

Presented By: Alyssa Kay Gracely, MD

Introduction: There is a paucity of patient reported outcome measures (PROM) data for women with urethral strictures. Prior literature focuses on anatomic success, with almost no data describing patient centered outcomes. To fill this critical gap, we aim to evaluate change in PROM among women who underwent surgery for stricture.

Methods: Data were collected as part of a multi-institutional retrospective cohort study of women treated for urethral stricture between 2010-19. Median change between baseline and postoperative follow-up on the American Urological Association Symptom Index (AUA-SI) and Urinary Distress Inventory (UDI-6) were assessed using paired Wilcoxon signed-rank tests.

Results: Of the 210 women in the dataset, 57 had AUA-SS or UDI-6 scores and 26 had both baseline and post-operative data for either measure. Median follow-up time was 21 months (IQR 7, 37). The majority of women with complete PROM data underwent urethroplasty (77%) and strictures did not recur (73%).

The median AUA-SI was 21 (IQR 12, 28; n=39) at baseline and 10 (IQR 5,24; n=33) at follow-up. Among 18 patients with complete data, there was a median decrease 12 (IQR -18,-2) points in AUA-SI (p=0.003). This change represents a clinically significant improvement in symptom severity from severe to moderate. The median AUA quality of life (QOL) score was 6 (IQR 4,6; n=36) at baseline and 3 (IQR 2,5; n = 30) at follow-up. Among 15 patients with complete data, there was a median improvement of 2 points (-5,0; p=0.007) on the AUA QOL score, indicating a shift from "unhappy" to "mixed." (Table) Median UDI-6 scores were 50 (IQR 33,75; n=20) and 17 (IQR 0, 39; n=15), at baseline and follow-up, respectively. There was a median decrease of 19 points (-31, -11; p=0.01, n=8), which achieved statistical and clinical significance. (Table) There was no difference in change in PROM between surgery type nor based on recurrence.

Conclusion: Women with urethral strictures have severe lower urinary tract symptoms at baseline which improved significantly after surgery. These findings, though limited, represent some of the most robust data on PROM for women with urethral stricture disease. This study also underscores the importance of ongoing efforts to integrate PROM into routine urologic practice.

Median Patient Reported Outcome Scores at baseline and after treatment for female urethral stricture

	Baseline (IQR)	Postoperative (IQR)	Median Difference (IQR)	p*
AUA-SS (n=18)	21 (16, 29)	6 (3, 19)	-12 (-18,-2)	p=0.003
AUA-QOL (n=15)	6 (4,6)	3 (1, 4)	-2 (-5,0)	p=0.007
UDI-6 (n=8)	38 (28,53)	14 (6, 36)	-19 (-31, -11)	p=0.01

*Difference between baseline and postoperative follow-up using paired wilcoxon signed rank test; AUA: American Urological Association SS: Symptom Score QOL: Quality of Life; UDI: Urinary Distress Inventory

Funding: The SUFU Research Network is funded by the SUFU Foundation

#M48 | TWO STAGE MANAGEMENT OF COMPLEX BLADDER NECK CONTRACTURE ASSOCIATED WITH STRESS URINARY INCONTINENCE AFTER PROSTATE CANCER TREATMENT IN THE GERIATRIC POPULATION: 100 CONSECUTIVE CASES

Angelo Gousse, MD, Ahmed El-Farrah, DO, Nazia Bandukwala, DO

Bladder Health and Reconstructive Urology Institute

Presented By: Angelo E. Gousse, MD

Introduction: Bladder neck contracture (BNC) associated with Stress Urinary Incontinence (SUI) is a major complication of prostate cancer treatment. Clinicians are often hesitant to offer geriatric patients curative treatment for such complex complications. We report the outcome of our approach using a two-stage management of BNC associated with SUI after prostate cancer treatment in the geriatric population.

Methods: Data from 100 consecutive patients who underwent Artificial Urinary Sphincter (AUS) were reviewed from April 2012 to August 2020. Patients age>65 were assigned to the Geriatric Subpopulation. 25 patients identified (65 to 88 years, Mean age=76) with Post Radical Retropubic Prostatectomy (RRP) or External Beam Radiation (XRT) induced BNC associated with SUI elected to undergo our two-stage management. Stage I: Deep Transurethral Incision for Bladder Neck Contracture (TUIBNC) with Collin's Hot knife. Stage II: Bulbar urethra AUS implantation (AMS-800), 6-8 weeks after TUIBNC, once bladder neck patency had been demonstrated cystoscopically.

Results: A 96 month study, mean follow up 48.5 months. 25 patients who met geriatric criteria underwent our two-staged approach of TUIBNC followed by AUS. Prostate cancer treatment consisted of RRP in 10 patients, XRT in 8 patients, and a combination of RRP and XRT in 7 patients. 18 patients required only one TUIBNC pre AUS Implant, 6 patients required two, and another three patients TUIBNC prior to AUS implant. One patient required TUIBNC after AUS implant Mean FU 48.5 Months. Complications included: AUS cuff erosion (4), Infected device (2), unable to use AUS due to deteriorating manual dexterity (2), continued leakage associated with cuff atrophy (4). 18/25 (72%) of patients are socially continent using less or equal to 1 pad/day and happy with the device. Urinary Distress Inventory (UDI-6) administered pre and post AUS was statistically significant ($p < 0.05$). All (100%) patients would recommend this approach to their friends and relatives on questionnaire.

Conclusion: Our data indicates that even in very complex incontinent patients with XRT and RRP recurrent BNC, the two-stage approach provides a good outcome with minimal morbidity in a difficult cohort of patients. Chronologic age alone should not deter from AUS placement because many geriatric patients are highly motivated to receive curative treatment of their urinary incontinence.

Funding: N/A

#M49 | OUTCOMES OF GENDER-AFFIRMING VAGINOPLASTY IN OBESE AND NON-OBESE PATIENTS

Jonathan Alcantar, AB, Alexandra Millman, MD, MPH, Ushasi Naha, BA, Luca Morgantini, MD, Ömer Acar, MD, Ervin Kocjancic, MD

University of Illinois at Chicago

Presented By: Alexandra L. Millman, MD, MPH

Introduction: Transgender individuals may elect to undergo genital reconstructive surgery (GRS). While it is generally agreed that all patients must meet the requirements set out in the World Professional Association for Transgender Health (WPATH) standards of care, some physicians also restrict eligibility for surgery based on a patient's weight or body mass index (BMI). In our experience with gender-affirming vaginoplasty, we have not utilized a BMI cut-off. In this report, we explore the impact of BMI on the risk of complications following GRS by comparing the outcomes of obese and non-obese patients undergoing either penile inversion vaginoplasty or robotic-assisted peritoneal flap vaginoplasty.

Methods: A prospective cohort of all gender-affirming vaginoplasties in our practice between