

# **Post-void Dribbling and Ejaculatory Dysfunction After Urethroplasty, what can we blame it on ?**

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# Disclosure

- I have no disclosures



# Background

- It is estimated that 17 to 23% of men are bothered post-void dribbling and sexual dysfunction after urethroplasty
- theories exist for the pathophysiology of post-void dribbling and ejaculatory dysfunction after urethroplasty:
  - perineal nerve damage
  - injury to the bulbospongiosus muscle
  - impairment of the physiologic expansion and contraction of the urethra leading to creation of a reservoir effect
  - sacculation of the graft in the cases

one was

used to augment the repair

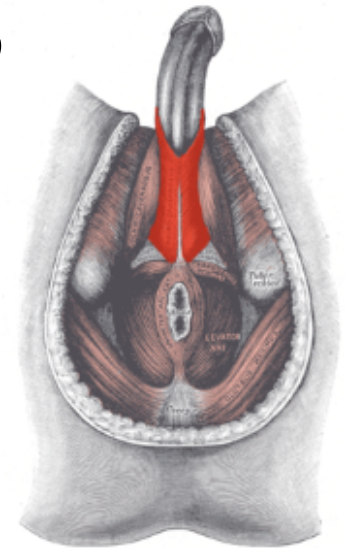


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# Background

- bulbospongiosum is a paired muscle that is joined by a central tendon and covers the bulb of the urethra
- rhythmic contraction of this muscle is thought to expel all of the semen as well as the last drop of urine
- contradicting results in the literature with regards to post-operative ejaculatory dysfunction or post void dribbling after a urethroplasty done with muscle sparing vs non-muscle sparing



# Objective

- explore if there is a common etiology for post -void dribbling and ejaculatory dysfunction in patients who underwent urethroplasty
- study different factors affecting those symptoms such as dividing bulbospongiosum muscle, use of graft vs primary anastomosis



# Methods

- Trauma and Urologic Reconstruction Network of Surgeons (TURNNS) outcor database
- included patients who have had an **anterior urethroplasty** for urethral stricture
- Exclusion criteria:
  - etiology of stricture hypospadias/ho hypospadias repair
  - concurrent strictures in the membranous and prostatic urethra
  - patients who didn't have at least one follow up visits 2 to 12 months
  - who didn't complete post-operative questionnaires pertaining to symptoms in question



# Methods

## **Ejaculatory function:**

Male Sexual Health Questionnaire (MSHQ)

**How would you rate the strength or force of your ejaculation**

- 1- very much less strong than it used to be or couldn't ejaculate
- 2- much less strong than it used to be
- 3- a little less strong than it used to be
- 4- somewhat less strong than it used to be
- 5- As strong as it always was

## **Post-void dribbling:**

Patient reported outcome measure (PROM) questionnaire

**How often do you have slight wetting of your pants a few minutes after you had finished urinating and had dressed yourself?**

- 0- never
- 1- occasionally
- 2- sometime
- 3- most of the time
- 4- all of the time



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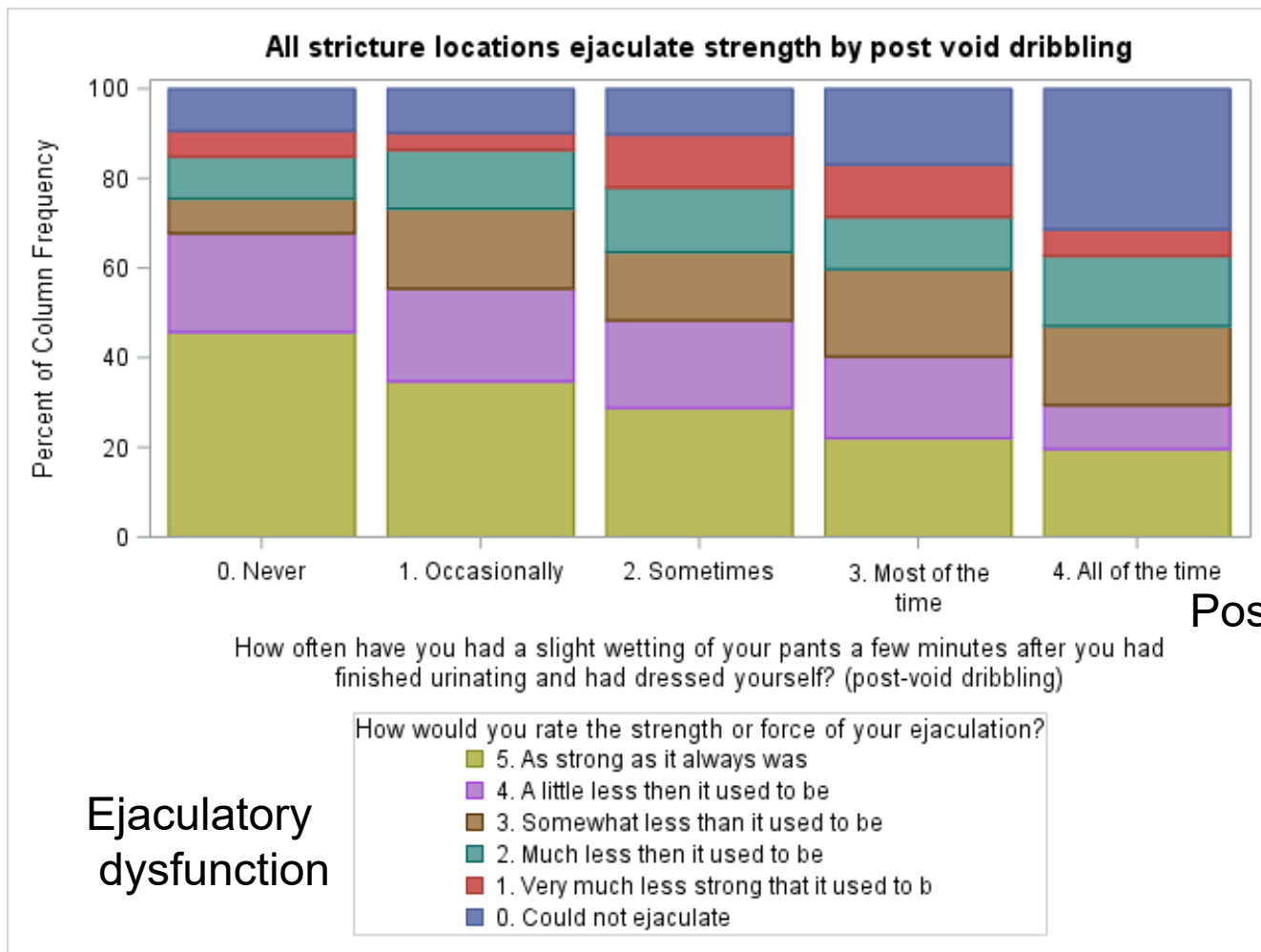
# Methods

- used chi-square test to study the co-existence of both symptoms in patient after urethroplasty
- subset analysis to compare those symptoms in patients who had urethroplasty for proximal bulbar stricture (division of bulbospongiosum muscle) vs penile stricture (bulbospongiosum not divided)
- conducted subset analysis to compare those symptoms in patients who had urethroplasty for proximal bulbar stricture with graft vs primary anastomosis





# Results



Strong correlation of both symptoms with **p-value <0.0001**

Post-void dribbling

Ejaculatory dysfunction



# Results

A	Bulbar strictures			B	Penile strictures	
	Any post void dribbling	No post void dribbling	Total		Any post void dribbling	No post void dribbling
Any ejaculatory dysfunction	184 (41.44%)	86 (19.37%)	269 (60.81%)	89(50.86%)	30 (17.14%)	144 (68%)
No ejaculatory dysfunction	86 (19.37%)	88 (19.82%)	172 (39.19%)	31 (17.71%)	25 (14.29%)	76 (32%)
<b>Total</b>	270 (61.81%)	174 (39.19%)	444	120 (68.57%)	55 (31.43%)	175
	p-value <0.0001			p-value 0.0098		



# Results

B Penile strictures		
Any post void dribbling	No post void dribbling	Total
89(50.86%)	30 (17.14%)	144 (68%)
31 (17.71%)	25 (14.29%)	76 (32%)
120 (68.57%)	55 (31.43%)	175
p-value 0.0098		

D Bulbar strictures without graft		
Any post void dribbling	No post void dribbling	Total
78 (37.5%)	50 (24.04%)	128 (61.54%)
27 (12.98%)	53 (25.48%)	90 (38.46%)
105 (50.48%)	103 (49.52%)	208
p-value 0.002		

C Bulbar strictures with graft			
	Any post void dribbling	No post void dribbling	Total
Any ejaculatory dysfunction	106 (44.92%)	36 (15.25%)	144(61.43%)
No ejaculatory dysfunction	59 (25%)	35 (14.83%)	95 (38.57%)
Total	165 (69.88%)	71 (30.12%)	236
p-value 0.0335			



# Limitations

- retrospective nature of study
- follow up and response rate to questionnaires was limited
- small cohort of patient in subgroup analysis

# Strength

- Large cohort
- first report exploring possible mechanisms of sexual and urinary symptoms after urethroplasty
- prospectively collected data in database
- outcome measure based on patient reported outcomes using validated questionnaire



# Conclusion

- the refinement of surgical techniques for urethroplasty over time has led to excellent functional outcomes, the focus now shifts toward minimizing long term complications. First step would be understanding the underlying cause
- we showed that ejaculatory dysfunction and post-void dribbling are associated, suggesting a common etiology
- This association persisted in penile and bulbar -> not associated with BS muscle
- This association persisted in graft vs. no graft -> not associated with graft sacculation
- By process of exclusion, this suggests loss of elasticity or neurologic cause. Argues against BS muscle sparing approaches.



# Questions



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