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### Title

MP84-08 NEW INSIGHT INTO THE ASSOCIATION OF BICYCLE RELATED GENITAL NUMBNESS AND SEXUAL FUNCTION: RESULTS FROM A LARGE, MULTINATIONAL, CROSS-SECTIONAL STUDY

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MIIA: IIEF [20.9(7.3) vs 20.7(4.8); p=0.132], patient EDITS [76.0(25.6) vs 74.7(20.8); p=0.256] and partner EDITS [72.5(29.1) vs 73.1(21.4); p=0.114]. Similarly, QoLSPP showed comparable results among the groups PSA and MIIA: functional domain [3.9(1.4) vs 4.0(1.2); p=0.390], personal [4.0(1.2) vs 4.1(1.0); p=0.512], relational [3.7(1.5) vs 3.9(1.2); p=0.462] and social [4.0 (1.2) vs 3.9 (1.2); p=0.766].

CONCLUSIONS: Penoscrotal and minimally invasive infrapubic approaches demonstrated to be safe and efficient techniques for IPP implantation, leading to high level of both patients and partners satisfaction. Additionally, the minimally invasive infrapubic approach showed a shorter operative time and a tendency for a faster return to sexual activity.

Source of Funding: None

#### MP84-07 TRANSURETHRAL SEMINAL VESICULOSCOPY WITH A URETEROSCOPE FOR THE TREATMENT OF SEMINAL VESICLE STONES

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INTRODUCTION AND OBJECTIVES: Stones in seminal vesicles are extremely rare, Hemospermia, infertility, perineal/testicular pains and painful ejaculation are common primary symptoms. Transrectal ultrasonography, pelvic computed tomography or magnetic resonance imaging are the useful diagnostic method for patients with such symptoms. Seminal vesicle stones are one of the main cause of persistent or intractable hemospermia. Treatment requires removal of the stone, generally through a laparoscopic technique or open surgery. However, these procedures are always invasive and may produce some complications. The purpose of this study was to apply a transurethral seminal vesiculoscopy for diagnosis and treatment of the seminal vesicle stones with a ureteroscope. We assessed whether this transurethral endoscopic technique is feasible and effective in the diagnosis and treatment of the seminal vesicle stones with intractable hemospermia.

METHODS: Totally 76 patients with intractable hemospermia underwent transurethral seminal vesiculoscopy through the distal seminal tracts using a 7.3F rigid ureteroscope. Age of patients was from 23 to 58 years, the average was 42 years old. The patients' symptoms ranged in duration from 3 to 180 months(mean duration 45.8 months). All patients underwent either transrectal ultrasonography, pelvic computed tomography or magnetic resonance imaging before operation. Positive imaging findings were observed in patients with seminal vesicle stones and dilated seminal vesicle size.

RESULTS: All 76 patients were successfully performed transurethral seminal vesiculoscopy. A 7.3F rigid ureteroscope entered the lumen of the verumontanum and then the seminal vesicle under direct vision. the ureteroscope was inserted retrograde through the orifice of the verumontanum guided by a 0.032-inch Zebra guidewire. After entering the lumen of the verumontanum, the bilateral ejaculatory duct orifices were identified under low pressure saline irrigation. The seminal vesicle interior with single or multiple yellowish stones ranging from 1 to 8 mm in diameter was clearly visible. Almost of the stones were easily fragmented and endoscopically removed using a grasper, but if the stone is large and hard, it can be fragmented by holmium laser lithotripsy, and then removed by a grasper. The residual fragments were then by irrigation basket extraction. The operative time was 30 to 120 minutes (mean 52 minutes). The mean follow-up period was 15 months(range 3-36 months). Symptoms of hemospermia disappeared after one to three months. Postoperative complications, such as retrograde ejaculation, urinary incontinence, rectal injury or epididymitis, were not observed in the present study.

CONCLUSIONS: Our study demonstrates that transurethral seminal vesiculoscopy is safe and effective in the diagnosis and treatment of the seminal vesicle stones. This endoscopic technique can be performed with minimal complications. We present transurethral seminal vesiculoscopy as a new approach for the treatment of seminal vesicle stones with hemospermia. This minimally invasive technique is safe and effective. It can be easily performed with minimal complications and requires expertise in transurethral resection.

Source of Funding: none

#### MP84-08

NEW INSIGHT INTO THE ASSOCIATION OF BICYCLE RELATED GENITAL NUMBNESS AND SEXUAL FUNCTION: RESULTS FROM A LARGE, MULTINATIONAL, CROSS-SECTIONAL STUDY

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INTRODUCTION AND OBJECTIVES: Prolonged time in the saddle is associated with decreased penile and perineal blood flow and temporary genital numbness (GN). The impact of numbness on future sexual function is unclear. We aim to assess the association of GN and sexual dysfunction in cyclists.

METHODS: Cyclists were recruited through Facebook advertisements and outreach to sporting clubs. This is a secondary analysis of a larger epidemiologic population based study that examined sexual and urinary wellness in athletes. We queried cycling habits and erectile function using Sexual Health Inventory for Men (SHIM).

RESULTS: The demographic and cycling habits of 2,774 male cyclists are summarized in table 1. Among cyclists, there was a statistically significant increase in trend of GN with more years of biking (p=0.002), more frequent weekly biking (p<0.001), and longer biking distance at each ride (p<0.001). Less frequent use of padded shorts (OR 0.14, p<0.001), lower handlebar (OR 0.49, p<0.001) were associated with GN but BMI (OR 1.1, p=0.33) and age (OR 1.2, p=0.15) were not. In a multivariate logistic regression model, after adjusting for age, BMI, and lifetime miles (calculated by average daily cycling mileage x cycling days/week x cycling years.), there were no statistically significant differences in mean SHIM score between cyclists with and cyclists without GN (20.3 vs. 20.2, p=0.83). Interestingly however, the subset of cyclists who reported GN in the buttock reported statistically significantly worse SHIM (20.3 vs. 18.4, p<0.001). This association was not present in cyclists with GN in the scrotum, penis, or perineum and remained significant after adjusting for overall biking intensity.

CONCLUSIONS: Cyclists report GN in proportion with biking intensity but GN is not associated with worse sexual function in this cohort.

Table 1 - Demographic and cycling characteristics of participants

	No numbness N=1.557	Numbness N=1,217	p-value
Age (years)		,	0.003
18-30	20.1%	18.9%	
31-50	44.2%	47.3%	
51-65	29.2%	30.3%	
>65	6.5%	3.5%	
History of Hypertension	11.3%	11.2%	0.26
History of Diabetes	3.3%	1.2%	0.001
Current smoker	3.6%	1.8%	0.005
Cigarettes/day mean(SD)	5.7 (6.55)	5.2 (5.4)	0.75
History of BPH	8.3%	7.8%	0.89
BMI mean(SD)	25.5 (4)	25.8 (3.9)	0.02
Cycling duration (years)			0.008
<2	6.5%	3.7%	
3-5	19.6%	18.5%	
5-10	18.1%	18.5%	
>10	55.9%	59.3%	
Days cycled/ week, median (IQR)	4 (2-4)	4 (4-4)	<0.001
Lifetime miles, median (IQR)	27,797	37,620	<0.001
	(8,320-59,565)	(18,720-79,420)	<0.001
SHIM mean(SD)	20.1 (5.7)	20.4 (5.1)	0.17

Abbreviations: BMI: body mass index, BPH: benign prostatic hypertrophy, IQR: inter-quartile range, SD: standard deviation, SHIM: sexual health inventory for men

**Source of Funding:** The project was supported by Dr. and Mrs. Russell and Sara Hirsch.

#### MP84-09 LOW COMPLIANCE TO POST-VASECTOMY SEMEN ANALYSIS GUIDELINES IN VETERANS

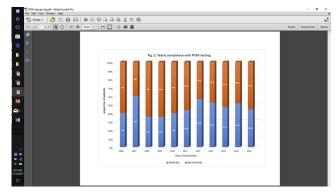
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INTRODUCTION AND OBJECTIVES: Post-vasectomy semen analysis (PVSA) is required to confirm the success of vasectomy per AUA guidelines. However, patient compliance to PVSA is unknown. We sought to determine the PVSA compliance rate and to identify factors that predicted compliance to the PVSA testing.

METHODS: We performed a retrospective review of men who underwent vasectomy at our Veterans Administration hospital between January 2006 and December 2016. All patients underwent one or more pre-procedure counseling. Counseling emphasized that PVSA was required for definitive confirmation of the procedure's success and that contraception must be used until negative PVSA. Vasectomies were performed with local anesthesia in the office setting or under monitored anesthesia in the operating room. Specimens were sent for pathologic confirmation of vas. Post-vasectomy management included follow-up in 2-4 weeks and PVSA in 2-3 months or after 15-20 ejaculations. The PVSA compliance rate was calculated. Univariate and multivariable logistic regression analyses were performed to elucidate factors that predicted PVSA compliance.

RESULTS: 331 men with mean age of 38 years underwent vasectomy. 84% were married and 88% had children. 78% of the vasectomies were performed in the office. Only 153 men completed PVSA, representing 46% compliance rate which remained stably low over time (Fig. 1). On univariate analysis, the PVSA group were less likely to have kids (84% vs 92%, p=0.033) and more likely to follow-up for post-procedure visit (86% vs 69%, p=0.00019) compared to the No-PVSA group. There was no difference between groups in terms of age, race, marital status, procedure year or location, procedure-specific factors, pathologic findings or complication. On multivariate analysis, attending post-vasectomy visit was associated with increased odds (OR 2.84, 95% CI 1.46-5.49) whereas fatherhood was associated with decreased odds (OR 0.37, 95% CI 0.17-0.83) of PVSA compliance

CONCLUSIONS: Despite peri-procedural counseling, only 46% of veterans complied with PVSA requirement. Men without kids and those who attended post-vasectomy visit were more likely to comply with PVSA. Future studies to better understand the barriers and to develop new testing technique are needed to improve compliance



Source of Funding: None

#### **MP84-10**

## ORGASMIC AND ERECTILE DYSFUNCTION IN MEN WITH LONGSTANDING TYPE 1 DIABETES

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INTRODUCTION AND OBJECTIVES: Studies of sexual dysfunction in men with diabetes focus on erectile dysfunction (ED). There is a scarcity of research on prevalence and risk factors for orgasmic dysfunction (OD), the relationship between ED and OD, and natural history. We determined the burden and characteristics of OD and ED in men with type 1 diabetes (T1D) and examined rates over time.

METHODS: The study consisted of men enrolled in an ancillary study of urologic complications in the Epidemiology of Diabetes Interventions and Complications (EDIC) Study. The sexual function was assessed first in 2003 in 496 T1D men using the International Index of Erectile Function (IIEF), and re-evaluated in 2010 in 563 men. ED and OD were defined using standard cutoffs of the IIEF Erectile and Orgasmic Domain specific scores, respectively. Logistic regression models, adjusted for age, were used to evaluate the associations of socio-demographic, clinical, and diabetes-related characteristics and ED/OD status in 2010. Reports of progression and regression of ED and OD between 2003 and 2010 were examined in 452 men who provided information in both years.

RESULTS: Of the 563 men in 2010, 260 (46%) reported OD and/or ED. Specifically, 4% reported OD only, 31% ED only and 11% reported both ED and OD. OD only was significantly associated with depression and low sexual desire while ED only was associated with older age and androgen deficiency. In men with both ED and OD, associations between older age and androgen deficiency strengthened and strong associations with hemoglobin A1c, nephropathy, and neuropathy were observed. Of the men who reported OD only in 2003, 29% reported progression to both ED and OD and 43% report remission of OD by 2010. In men reporting ED only in 2003, 19% reported progression to both ED and OD by 2010 and 9% report remission of ED.

CONCLUSIONS: In patients with long-standing T1D there is an increased burden of OD. Markers of diabetes severity appear to be strongly associated with the concurrent report of ED and OD. Examination of sexual dysfunction over time demonstrates a greater rate of remission for those who report OD only. These findings suggest patients who report both dysfunctions may represent a severe phenotype associated with metabolic dysfunction and diabetes progression.