# CUA 2022 Annual Meeting Abstracts – Poster Session 1: Urinary Incontinence and Voiding Dysfunction

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## **MP-1.2**

# Use of sound waves through smartphone to monitor urinary flow patterns among rural northern Ontario residents — a potential digital health strategy?

Okechukwu Abara<sup>1</sup>, Sebastian Diebel<sup>2</sup>, Ndidi Abara<sup>3</sup>

<sup>1</sup>Division of Urology, Department of Surgery, NOSM Medical University, Sudbury/Thunder Bay, ON, Canada; <sup>2</sup>Undergraduate Medical Education, NOSM Medical University, Sudbury/Thunder Bay, ON, Canada; <sup>3</sup>Yuma Regional Medical Center, University of Arizona College of Medicine, Yuma, AZ, United States

#### Support: Ontario Health (OTN)

**Introduction:** Monitoring urinary flow patterns of our patients remains a function of the urologist. There are many devices that serve this purpose, and some are home-based. Recent interest in audio-based uroflowmetry applications makes telemedicine and smartphone technologies potential drivers for self-empowerment, improved access, and home-based care. Between June 15, 2021, and February 18, 2022, we evaluated the use of a publicly available electronic uroflow application (app) among residents of rural Northern Ontario to determine if the participants were able to download the app, generate data, and send it to their urologist for review and treatment decisions

**Methods:** Inclusion criteria were: adults >18 years; own smartphone; internet access; and referred with a urological condition. Informed consent was in English/French. Following a telemedicine assessment, participants were given unique ID numbers and were asked to download the app, use it on four consecutive days for all urination activities, and send data (International Prostate Symptom Score [IPSS], uroflow tracings) to their urologist. There was a followup virtual care visit to review data and treatment options. Feedback was obtained by an online survey. Data collection and analysis were done via Excel and descriptive statistics. The study was approved by the Laurentian University Ethics Review Board.

**Results:** Out of the 40 participants, 28 (70%) were men and 12 (30%) women, between 22 and 75 years old (average 64 years). Thirty-six of 40 (90%) completed the trial. Urological conditions included benign prostatic hyperplasia, prostate cancer, voiding dysfunction, overactive bladder, hematuria, stones, kidney cancer, and bladder cancer. Most participants continued to use the app and send data after four days (max 60 days, average 12.9 days). All volunteers found the app easy to use. It was simple and provided convenient, multiple urination data for individualized care. There were a few technical issues, all of which were were resolved. There were no comparative studies.

**Conclusions:** A smartphone app using sound waves is a simple and convenient tool that can potentially provide important urination data for monitoring and therapeutic purposes. Multicenter trials and comparative studies are recommended.

## **MP-1.4**

#### Treatment patterns in men prescribed benign prostatic obstruction or overactive bladder medications: A Canadian, retrospective, population-based study

Sender Herschorn<sup>1</sup>, Sarah Neu<sup>1</sup>, Rano Matta<sup>2</sup>, Jennifer A. Locke<sup>1</sup>, Rodrigo Martins de Almeida<sup>3</sup>, Lora Todorova<sup>3</sup>, Matthias Stoelzel<sup>4</sup>, Patrick Covernton<sup>3</sup> <sup>1</sup>Sunnybrook Health Sciences Centre, University of Toronto, Toronto, ON, Canada; <sup>2</sup>Division of Urology, University of Utah, Salt Lake City, UT, United States; <sup>3</sup>Astellas Pharma Europe, Woking, United Kingdom; <sup>4</sup>Astellas Pharma Europe B.V., Leiden, Netherlands

**Introduction:** Lower urinary tract symptoms include voiding, often indicative of benign prostatic obstruction (BPO), and storage symptoms, potentially indicative of overactive bladder (OAB). This study aimed to describe real-world treatment patterns for BPO and OAB in Canadian men and identify gaps in their treatment.

Methods: This population-based, retrospective cohort study was completed using linked health administrative databases in Ontario, Canada. From 2010–2018, males aged ≥66 years with ≥1 prescription for an OAB or BPO medication were included. The primary objective was to determine time from initiation of OAB/BPO treatment to change in therapy (time-to-event analysis). A secondary objective was to compare healthcare costs between both groups.

**Results:** Age at index, geographic region, and income were similar between groups (OAB: n=9229 [5.8%]; BPO: 151 055 [94.2%]). Median (interquartile range [IQR]) followup was: OAB 1480 (873–2310); BPO 1622 (932–2475) days. The most common first-line OAB medication class was antimuscarinics (78.1%; second-line: alpha-blockers, 63.1%); for BPO, first-line alpha-blockers were most common (90.8%; second-line: 5-alpha reductase inhibitors, 58.8%). Mean age at medication initiation in both groups was 75 years. Relative to the OAB group, men in the BPO group were less likely to experience a therapeutic change and had longer times to first change in therapy (OAB: median [IQR] days 78 [30, 231]; BPO: 104 [30, 350]) (Figure 1, Table 1). The most frequently observed first therapeutic change (Table 2) in both groups was reatment discontinuation (OAB: 75.6%; BPO: 69.9%). Mean healthcare costs were higher in the OAB vs. the BPO group, both in the pre- (OAB: \$12 354 vs. BPO: \$11 497) and post-index years (OAB: \$14 423 vs. BPO: \$12 852).

**Conclusions:** In this population, men initiating OAB medications changed therapy sooner compared to those starting BPO medications. In both groups, discontinuation was the most common change in therapy.



MP-1.4. Figure 1.

MP-1.4. Table 1. Time to first change to index therapy in
the BPO and OAB groups

	Measure	OAB group n=9229	BPO group n=151 055
Time to first change in therapy	Mean (SD)	219.9±357.0	307.9±488.2
	Median (IQR)	78.0 (30.0–231.0)	104.0 (30.0–350.0)
(measure from index date)	Range (min, max)	1–3358	1–3514

BPO: benign prostatic obstruction; IQR: interquartile range; OAB: overactive bladder; SD: standard deviation.

# MP-1.4. Table 2. First change to index therapy in the BPO and OAB groups during the followup period

Outcome measured	OAB group n=9229	BPO group n=151 055
Change in therapy, n (%)		
Stopping OAB/BPO medication	6389 (69.2)	84 624 (56.0)
Adding new medication (BPO to OAB or OAB to BPO)	618 (6.7)	3977 (2.6)
Adding another OAB/BPO medication from the same group	164 (1.8)	20 930 (13.9)
Switching to another OAB/BPO	873–877*	1705–1709*
medication from a different group	(9.5–9.5)	(1.1–1.1)
Switching within the same OAB/ BPO medication class	344 (3.7)	4707 (3.1)
BPO surgery	55 (0.6)	5116 (3.4)
Botox or sacral neuromodulation	1–5*	1–5*
surgery	(0.0 – 0.1)	(0.0–0.0)
Composite of above	8450 (91.6)	121 064 (80.1)

\*A range is presented because exact counts have been suppressed for privacy reasons. Notes: Botox and sacral neuromodulation or BPO surgery were highly infrequent; treatment discontinuation was assumed after a 60-day gap in medication coverage. BPO: benign prostatic obstruction; OAB: overactive bladder.

## MP-1.5

Quality-of-life outcomes following endoscopic excision of female stress urinary incontinence mesh and pelvic organ prolapse mesh <u>Katherine Anderson</u><sup>1</sup>, Marie-Aimée Perrouin-Verbe<sup>1</sup>, Lily Bridgeman-Rutledge<sup>1</sup>, Rachel Skews<sup>1</sup>, Hashim Hashim<sup>1</sup>

<sup>1</sup>Bristol Urological Institute, Southmead Hospital, Bristol, United Kingdom **Introduction:** Erosion of transvaginal stress urinary incontinence and prolapse mesh into the urinary tract is a serious complication. Endoscopic partial mesh removal is an option for those who desire a less morbid procedure than full mesh removal, with shorter operating room time, less blood loss, and faster recovery time. However, the long-term quality-of-life (QoL) and functional outcomes for this approach are poorly studied. **Methods:** Patient-reported QoL outcomes of women who underwent partial mesh removal via transurethral laser excision or bipolar transurethral resection from April 2013 to August 2021 were collected via telephone survey using a composite questionnaire (Urinary Distress Inventory [UDI]-6, EQ-5D-5L, International Consultation of Incontinence Questionnaire - Satisfaction [ICIQ-S]) and questions regarding sexual function.

**Results:** Twenty-seven women underwent transurethral mesh removal surgery. Median age was 61 (45–87). Mesh erosion into the urethra or bladder caused pain (43%), calcification (41%), recurrent urinary tract infections (UTIs) (36%), urinary urgency (23%), or voiding difficulties (9%). During 33 endoscopic surgeries for mesh excision, 67% had a concurrent procedure performed under the same anesthetic (Table 1). Median hospital postoperative stay was one day (0–4). Thirty-day complication rate was 10% (all were Clavien-Dindo 1). Long-term outcomes from 20 patients (mean followup of 33 months) showed that mesh removal was rated successful by 75%, 85% were at least moderately satisfied with their surgery, 85% would recommend the surgery to others, and 95% would have the surgery again if in the same situation.

**Conclusions:** Transurethral endoscopic surgery for removal of eroded transvaginal mesh is associated with high patient satisfaction and low morbidity in appropriately selected patients.

#### MP-1.5. Table 1. Mesh excision intra-operative information

Mesh type (n=39)*				
Prolapse	10% (4)			
Transobturator mesh tape (TOT)	28% (11)			
Retropubic tension-free vaginal tape (TVT)	59% (23)			
Unknown	2% (1)			
Erosion location (n=33)				
Bladder	42% (14)			
Urethra	33% (11)			
Both bladder & urethra	21% (7)			
Unknown	3% (1)			
Concomitant surgery (n=33)				
None	33% (11)			
Cystolitholapaxy	48% (16)			
Transurethral resection of the bladder	9% (3)			
Cystodiathermy	3% (1)			
Ureteroscopy	3% (1)			
Injection of urethral bulking agent	3% (1)			
*6 patients had >1 mesh in place at time of excision surgery.				

## **MP-1.6**

#### Long-term effect of sacral neuromodulation on nocturia for patients with refractory overactive bladder

Katherine Anderson<sup>1</sup>, Laura Thomas<sup>1</sup>, Hashim Hashim<sup>1</sup>

<sup>1</sup>Bristol Urological Institute, Southmead Hospital, Bristol, United Kingdom Introduction: Sacral neuromodulation (SNM) has been found to be effective for refractory overactive bladder (OAB) symptoms/detrusor overactivity (DO). However, there is a paucity of research regarding the effect of SNM on nocturia, which can be a difficult lower urinary tract symptom to treat. Methods: A retrospective chart review of patients who had an SNM implanted for refractory DO at our institution between July 2016 and July 2021 was done. All patients underwent a temporary peripheral nerve evaluation (PNE) and completed both pre-test and test-phase bladder diaries. Long-term followup of nocturia after SNM implantation was gleaned from clinic letters and bladder diaries.

Results: During the five-year time frame, 111 patients with refractory DO underwent SNM implantation. The Medtronic InterStim<sup>TM</sup> II was the most common neurostimulator used (89%, 99/111). Of all patients with DO, 95 reported nocturia. Analysis of those with nocturia found 81% (77/95) were female, mean age 53 years (range 19-83), and median nocturia frequency was three times (1-7). SNM resulted in a statistically significant decrease in nocturia episodes during the PNE phase, with 78% (73/93) reporting ≥50% improvement in nocturia (median nocturia=1; Z=-8.333, p<0.001). Long-term followup data after full SNM implantation was available for 82 patients with a median followup of 25.5 months (range 1–63). Improvement in nocturia of  $\geq$ 50% was reported by 62% (50/82) at long-term followup.

Conclusions: In patients with refractory OAB/DO, SNM was found to significantly decrease nocturia. Prospective studies are needed to better assess the impact of SNM on nocturia in patients with and without DO.

#### **MP-1.7**

#### Analyzing outcomes of the Adjustable Transobturator Male System (ATOMS) for post-prostatectomy incontinence and its relationship with overactive bladders and radiotherapy

<u>Samuel Farag</u><sup>1</sup>, Joanie Pelletier<sup>1</sup>, Salima Ismail<sup>1</sup>, Le Mai Tu<sup>1</sup> <sup>1</sup>FMSS, Université de Sherbrooke, Sherbrooke, QC, Canada

Introduction: The Adjustable Transobturator Male System (ATOMS) has been a treatment option for post-prostatectomy incontinence (PPI) in Canada since 2014. We report our single center's device effectiveness and security. We also explore the effects of prior radiotherapy and of overactive bladder (OAB) on these outcomes.

Methods: A retrospective study was done on 91 patients who had ATOMS implanted at our center. To classify mild, moderate, and severe incontinence, preoperative incontinence severity was defined as <2 pads per day (PPD), 2-4 PPD, and >4 PPD regarding 24-hour pad-count and/or <200 g, 200–400 g, and >400 g regarding 24-hour pad-test (24h-PT). "Dry" meant having <1 PPD postoperatively. "Improved" or "very much improved" patients were defined as having a cut in PPD by ≥50% or ≥75%, respectively. "Satisfied" patients were defined as having "much better" and "very much better" Patient Global Impression of Improvement-Incontinence (PGI-I) results.

Results: A total of 65 patients were included (26 excluded due to followup <12 months). Mean patient age was 71 years and mean followup was 29.9 months (SE 1.8; [12-67]). Median preoperative PPD and 24h-PT were 4 (interquartile range [IQR] 6-3; [1-10]) and 358 g (IQR 607-256; [34-1592]), respectively. Median PPD at final followup was 1 (IQR 2-0; [0-5]; p<0.001). Fifty-six (86.2%) patients noted overall improvement, with 43 (76.7%) being "very much improved" and 42 (75.0%) being "dry." Fifty-seven (87.7%) patients were satisfied. Eight (12.3%) patients experienced complications of any Clavien-Dindo grade, of which four were grade III (one device migration, three explantations due to leakage). Patients having received prior radiotherapy (n=22, 33.8%) had lower improvement (73% vs. 93%, p=0.03) and "dry" (45.5% vs. 74.4%, p=0.02) rates, yet had a higher number of adjustments (MED 3.5 vs. 2, p=0.01) and total instilled volume (MED 18.3 mL vs. 13 mL, p=0.01).

No other statistically significant difference was found in this subgroup or in that of patients with OAB.

Conclusions: This study vouches for ATOMS as a safe and effective device to treat PPI. Also, radiotherapy seems to influence effectiveness, whereas OABs do not.

#### **MP-1.8**

#### Antagonism of the p75NTR receptor decreases the extracellular activity of matrix metalloproteinase-9 and increases secretion of nerve growth factor by mouse urothelial cells in culture

<u>Aalya Hamouda<sup>1,2</sup>, Aya Hajj<sup>1,2</sup>, Stephanie Sirmakesyan<sup>1,2</sup>, Philippe</u> Cammisotto<sup>1</sup>, Uri Saragovi<sup>1</sup>, Lysanne Campeau<sup>1,2,3</sup>

Molecular and Regenerative Medicine, Lady Davis Research Institute, Montreal, QC, Canada; <sup>2</sup>Experimental Surgery, McGill University, Montreal, QC, Canada; <sup>3</sup>Surgery, Jewish General Hospital, Montreal, QC, Canada

Introduction: Overactive bladder (OAB) syndrome was reported to be characterized by low levels of nerve growth factor (NGF) in the urine of aging female patients, with stable levels of proNGF and a decreased NGF/proNGF ratio.1 This was linked to high activity of metalloproteinase-9 (MMP-9) that digests NGF.<sup>1</sup> P75 neurotrophin receptor (p75NTR) antagonism with THX-B restored normal NGF levels in bladders of type 1 diabetic mice with voiding dysfunction.<sup>2</sup> Here, we examine the in vitro effect of THX-B on MMP-9 activity in bladder cells and the consequences on secreted NGF.

Methods: Primary culture of urothelial cells (UCs) and smooth muscle cells (SMCs) were grown from rat bladders. RT-qPCR assessed NGF and MMP-9 gene expression. Immunohistochemistry and immunoblotting assessed protein expression. NGF and proNGF secretion were measured by ELISA and MMP-9 activity by enzymatic assays.

Results: NGF and MMP-9 mRNAs were expressed in UCs and SMCs at similar levels. At the intracellular protein level, NGF and proNGF were abundant in UCs, while SMCs produced a limited amount. Intracellular MMP-9 was seven times higher in SMCs than in UCs. The opposite patterns were observed extracellularly; secretion of active MMP-9 was 40 times higher in UC medium and was paralleled with lower extracellular NGF and proNGF compared to SMCs. THX-B treatment decreased the synthesis and secretion of MMP-9 and doubled the NGF concentration in the UC medium. ProNGF secretion was unaffected. Reduced MMP-9 was paralleled, with decreased intracellular  $\alpha$ 2-macroglobulin ( $\alpha$ 2m), a protein that prevents MMP-9 degradation. THX-B had little effect on SMCs both at the level of NGF and MMP-9.

Conclusions: UCs secrete most of the active MMP-9 and appear to be the primary target of p75NTR antagonism. The reduction MMP-9 expression and secretion by THX-B may be explained by reduced  $\alpha$ 2m in the same cells. Our results suggest that THX-B could be a therapeutic tool to improve OAB by targeting the urothelium to increase NGF. References

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## MP-1.9

# A systematic review of decision aids for patients with lower urinary tract dysfunction

<u>Carolyn MacLeod</u><sup>1</sup>, Blayne Welk<sup>1</sup>, Zachary Chuang<sup>1</sup>, Zoe MacNeily<sup>1</sup>, Chris Elliott<sup>2</sup>, Jeremy Myers<sup>3</sup>

<sup>1</sup>Division of Urology, Western University, London, ON, Canada; <sup>2</sup>Urology, Stanford University, Stanford, CA, United States; <sup>3</sup>Urology, University of Utah, Salt Lake City, UT, United States

**Introduction:** Lower urinary tract symptoms (LUTS) often have a significant impact on a patient's quality of life. Patient decision aids (PDAs) can be used to increase patients' knowledge of their health condition and help guide treatment decisions. Our objective was to systematically review PDAs designed for adult patients with LUTS.

**Methods:** MEDLINE, Embase, and CINAHL were searched from inception through to June 2021. This review followed PRISMA guidelines and was registered with PROSPERO (#220534). After designing comprehensive search strategies, two reviewers independently screened abstracts to identify those that met inclusion criteria. Studies reporting on the development or evaluation of PDAs for LUTS were included. PDAs were examined based on the International Patient Decision Aid Standards (IPDAS) and evaluation studies were compared in accordance with Standards for UNiversal reporting of patient Decision Aid Evaluations (SUNDAE).

**Results:** Overall, 2096 abstracts were reviewed and 33 full-text articles were analyzed, resulting in 17 papers meeting inclusion criteria. PDA topics included prostatic hyperplasia (12), stress incontinence (2), overactive bladder (2), and urethral strictures (1). Types of PDAs included an interactive multimedia program, a decision support booklet, a mobile application, and several web-based decision aids. No PDA met all IPDAS criteria. The main outcomes support the idea that PDAs increase patients' knowledge of their health condition, decrease decisional conflict, and improve patient satisfaction with their treatment choice. Adherence to SUNDAE ranged from 46–100%.

**Conclusions:** This systematic review revealed there is limited data published on PDAs to help patients guide management of their LUTS outside of the patient with prostatic hyperplasia. Given the increasing number of options available for patients with LUTS and the evidence supporting the use of PDAs, further development of high-quality PDAs would be beneficial.

## **MP-1.10**

## Sacral neuromodulation outcomes in male patients with overactive bladder (neurogenic and non-neurogenic)

Samuel Otis-Chapados<sup>1</sup>, <u>Fatemah Hussain</u><sup>1</sup>, Emad Alwashmi<sup>1,2</sup>, Dean Elterman<sup>1</sup>

<sup>1</sup>Division of Urology, Department of Surgery, University Health Network, University of Toronto, Toronto, ON, Canada; <sup>2</sup>Department of Surgery, Qassim University, Qassim, Saudi Arabia

**Introduction:** Sacral neuromodulation (SNM) is an effective, guidelinesupported, third-line treatment for overactive bladder (OAB). While the prevalence of OAB is similar between males and females, no studies assess the outcomes of SNM in male patients alone. In this retrospective study, we followed 53 male patients with neurogenic and idiopathic OAB to assess efficacy, personal satisfaction, complications, and need for other treatments.

**Methods:** Between 2014 and 2021, 53 male patients underwent SNM for neurogenic (n=7) and idiopathic (n=46) OAB. All patients were followed from 1–7 years after the SNM. Thorough chart review assessed patient satisfaction, symptom improvement, complications, and the need for other treatments.

**Results:** Most patients had medical therapy (79%) and/or intravesical Botox injection (28%) prior. After SNM, only five patients (9%) had insufficient symptom relief (<50% symptom improvement). Male patients reported high satisfaction within a year (91%), more than a year (81%), and significant improvement overall (94%). Most patients did not have any complications after surgery (77%) except for device pain (12%), insufficient efficacy (6%), and infection (5%). Most patients did not need other treatment after SNM (60%). Our analysis of the wet OAB subgroup (n=20) indicated the same early and long-term satisfaction (85%, 80%), overall

improvement (90%), complication rate (<25%), and adjunct treatment percentage (35%) as compared to the entire OAB cohort. The neurogenic bladder subgroup (n=7) also experienced high satisfaction, both at less and beyond 12 months (100% and 86%, respectively), improvement in symptoms (100%), no complications, and 29% use of adjunct treatments. **Conclusions:** SNM in men with neurogenic and idiopathic OAB is a useful and safe procedure. Most patients experience long-term satisfaction and improvements continue for years after the surgery. Finally, the complication rate in this study is less than the average found in the literature.

#### MP-1.11

# Intravesical botulinum toxin: Practice patterns and barriers to delivery from a survey of Canadian urologists

<u>James Ross</u><sup>1</sup>, Rhea Coriaty<sup>1</sup>, Conrad Maciejewski<sup>1</sup>, Duane R. Hickling<sup>1,2</sup>, Humberto Vigil<sup>1</sup>

<sup>1</sup>Division of Urology, Department of Surgery, University of Ottawa, Ottawa, ON, Canada; <sup>2</sup>The Ottawa Hospital Research Institute, Ottawa, ON, Canada

**Introduction:** Intravesical botulinum toxin is a safe and effective treatment for refractory overactive or neurogenic bladder. The objectives of this study were to conduct a survey of intravesical botulinum toxin administration practices in Canada, to compare practices based on level of training, and to identify barriers to delivery.

**Methods:** A voluntary online survey was sent to all Canadian urologists. Respondents who provide intravesical botulinum toxin were questioned on training, surgical volume, workup, technique, and followup practices. Those with formal training in functional/reconstructive urology were compared to those without. Potential barriers to treatment delivery were identified.

**Results:** The overall response rate was 26% (148/570). Most providers (59%) perform 1–10 treatments/month. Preoperatively, 51% perform cystoscopy and 43% perform urodynamics. A majority (66%) give routine antimicrobial prophylaxis; however, regimen and duration varied. Most (79%) perform some treatments under local anesthetic and 52% instill lidocaine solution for analgesia. There was a wide variation in technique with regards to the number of injections administered (range <10 to >20), volume administered per injection (range 0.5 mL to 2 mL), location of injections (bladder body vs. trigone vs. both), and depth of injection. Postoperative followup ranged from three days to three months. Respondents with fellowship training in functional/reconstructive urology performed more treatments per month and administered fewer injections per treatment. Common barriers to delivery included lack of experience/ training among non-providers (45%), lack of resources (34%), and lack of medication funding (32%).

**Conclusions:** Despite intravesical botulinum toxin being a widely accepted treatment, significant variability in practices and several barriers to delivery exist in Canada. Further study is required to optimize treatment access and quality.

#### MP-1.12

# Urologist-perceived barriers and perspectives on the underuse of sacral neuromodulation for overactive bladder in Canada

<u>Peter J. Gariscsak</u><sup>1</sup>, Gary Gray<sup>2</sup>, Stephen Steele<sup>3</sup>, Dean Elterman<sup>4</sup>, R. Christopher Doiron<sup>3</sup>

<sup>1</sup>School of Medicine, Queen's University, Kingston, ON, Canada; <sup>2</sup>Department of Surgery, University of Alberta, Edmonton, ON, Canada; <sup>3</sup>Department of Urology, Queen's University, Kingston, ON, Canada; <sup>4</sup>Department of Surgery, University of Toronto, Toronto, ON, Canada

**Introduction:** An estimated 18% of Canadians have overactive bladder (OAB), with approximately 24% of those reporting difficulty adhering to pharmacotherapy.<sup>1,2</sup> Although the proportion of medically refractory OAB is substantial, the availability of choice in patients' treatment is limited. To date, there has been no investigation into barriers facing sacral neuromodulation (SNM) as a treatment for OAB in Canada.

**Methods:** Current Canadian Urological Association members were invited to participate in an anonymous survey. Data collected included openended and Likert scale responses addressing barriers to referral for SNM.

Qualitative analysis used a Theoretical Domains Framework (TDF) while quantitative responses are reported using descriptive statistics.

Results: A response rate of 20.4% (n=142) was obtained. The majority of respondents believed SNM was underused (n=82, 57.7%) compared to only 6.3% (n=9) who believed it was used adequately. The most commonly cited reasons for not offering SNM were: lack of availability (n=85, 59.9%), lack of expertise (n=49, 34.5%), and funding (n=26, 18.3%). On a five-point Likert scale, participants were neutral regarding confidence to appropriately recommend SNM to patients (median 3, interguartile range [IQR] 2-4) and were not confident to manage patient care and issues related to SNM devices (median 2, IQR 1-3). On thematic analysis using the TDF, the most prevalent barriers to SNM care were related to infrastructure and resources. A lack of trained experts and lack of knowledge related to SNM use were also commonly cited barriers.

Conclusions: In this first study exploring urologist-perceived barriers to SNM referral for medically refractory OAB in Canada, urologists acknowledge that SNM implantation is underused but did not feel confident in recommending SNM appropriately. A lack of trained experts and poor funding were also identified as major barriers to SNM referral.

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#### MP-1.14

#### Does size matter? Long-term outcomes after treatment of bulbar urethral strictures with the Optilume drug-coated balloon

Mélanie Aubé-Peterkin<sup>1</sup>, Sean Elliott<sup>2</sup>, Ramón Virasoro<sup>3</sup>, Jessica DeLong<sup>3</sup>, Rafael E. Estrella<sup>4</sup>, Merycarla Pichardo<sup>5</sup>, Ramón Rodriguez Lay<sup>6</sup>, Gustavo Espino

<sup>1</sup>Division of Urology, Department of Surgery, McGill University Health Centre, Montreal, QC, Canada; <sup>2</sup>Urology, University of Minnesota, Minneapolis, MN, United States; <sup>3</sup>Urology, Eastern Virginia Medical School, Norfolk, VA, United States; <sup>4</sup>Urology, Clinica Union Medica, Santiago de los Caballeros, Dominican Republic; <sup>5</sup>Urology, URUS, Santo Domingo, Dominican Republic; <sup>6</sup>Urology, Urology Royal Center, Panama City, Panama; <sup>7</sup>Urology, Centro Especializado San Fernando, Panama City, Panama

Introduction: Stricture dilation with the Optilume drug-coated balloon (DCB) combines the mechanical dilation effect of a standard dilation balloon with the delivery of a controlled dose of paclitaxel circumferentially along the length of the treated segment. Successful drug delivery may be influenced by the relative sizing of the DCB to the urethra. Long-term outcomes for subjects treated with different sized DCBs in the bulbar urethra are reported here.

Methods: Men with recurrent bulbar strictures ≤2 cm with 1–4 prior endoscopic treatments were treated with the Optilume DCB. Long-term endpoints included freedom from repeat intervention, International Prostate Symptom Score (IPSS), peak urinary flow rate (Qmax), and functional success, defined as the proportion of subjects experiencing a  $\geq$  50% improvement in IPSS without repeat intervention. The first 25 consecutive subjects meeting eligibility criteria were treated with a 24F Optilume DCB, while the next 28 subjects were treated with a 30F Optilume DCB.

Results: Of the 53 subjects enrolled and treated, 41 were evaluable at the four-year followup (n=20 24F, n=21 30F). Demographics and stricture characteristics were similar between the two groups. Average IPSS improved from 25.2 at baseline to 7.8 at four years for the overall group, with significantly better scores at four years in the patients treated with the 30F DCB compared to 24F (3.8 vs. 12.1, p=0.004). Qmax followed a similar trend, with patients treated with the 30F DCB exhibiting significantly better Qmax values through four years (18.4 vs. 9.2 mL/sec). Functional success also favored the 30F DCB (83% vs. 50%).

Conclusions: Treatment of bulbar urethral strictures with the Optilume DCB may benefit from the use of the larger 30F DCB diameter. Published results from the ROBUST III study describe a similar benefit for the Optilume DCB when compared to those treated with a bare 30F balloon, indicating the benefit from a 30F DCB may lie more with the achievement of better drug delivery to the urethral mucosa.

#### MP-1.15

#### The relative importance of different consequences of nocturnal enuresis among older women: A conjoint analysis experiment Blayne Welk<sup>1</sup>, Michael Kennelly<sup>2</sup>

<sup>1</sup>Department of Surgery, Western University, London, ON, Canada; <sup>2</sup>Departments of Urology, Obstetrics, and Gynecology, Carolinas Medical Center, Atrium Health, Charlotte, NC, United States

Introduction: Nocturnal enuresis (NE) occurs in 3% of older women.<sup>1</sup> Our objective was to conduct a conjoint analysis experiment to better understand the relative importance of different consequences of NE.

Methods: Using expert clinical opinion and input from a patient stakeholder, we developed a conjoint analysis survey that included four attributes related to NE: awakening at night, feeling rested in the morning, restricting fluid intake before bed, and skin breakdown due to NE. We performed a prospective, cross-sectional, online study of women over 62 years of age with self-reported NE using Sawtooth Software. Patients completed baseline questions, the International Consultation on Incontinence Questionnaire Nocturia Quality of Life (ICIQ-NQoL) questionnaire, and the conjoint analysis experiment. Data validity checks were built into the questionnaire. Hierarchical Bayes random effects regression analysis was used to determine the relative importance of the four attributes

Results: A total of 200 people completed the study. The mean age was 71 (standard deviation [SD] 6) years, and most were Caucasian (183/200) and living independently (197/200). The most common management of enuresis was diapers/pads (132/200). Approximately half of the participants experienced enuresis several times a week or nightly (101/200), and most had coexisting mixed incontinence (140/200). The most important attribute was the frequency being awakened at night (34, SD 16) and the frequency of feeling rested in the morning (32, SD 15); they were moderately correlated (r=0.43, p<0.01). Limiting drinking before bed (18, SD 12) and skin breakdown (16, SD 10) had significantly lower importance scores (p<0.05) and were not correlated. Age, body mass index, and the ICIQ-NQoL score were generally not significantly associated with the importance scores.

Conclusions: Older women with NE place significantly more importance on the frequency of awakening at night and feeling rested in the morning, and lesser importance on associated lifestyle modifications or physical manifestations of NE.

- Reference
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