

Moderated Poster Session 4: Trauma/Reconstruction & Voiding Dysfunction

Friday, November 14, 2014
10:30 a.m. – 12:15 p.m.

P46

Urethroscopy With a Rigid Ureteroscope Facilitates Urethroplasty

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Background: Urethroplasty requires meticulous attention to tissue quality and complete resection or grafting of the stenotic lesion to ensure adequate healing. Preoperative retrograde urethrogram (RUG) gives valuable information regarding stricture number, length and location. However, it does not assess tissue quality and it poorly predicts the distance of the proximal aspect of the stricture from the voluntary sphincter. We describe our series of urethroplasties performed with concomitant urethral evaluation with a rigid ureteroscope. Urethroscopy with the narrow caliber ureteroscope reliably determines stricture quality, length, number, and distance from the sphincter. It also allows evaluation of the prostatic urethra and bladder with direct visual intraluminal placement of a guidewire, all of which facilitates urethroplasty.

Methods: Retrospective review was performed on urethroplasties performed from July 2012-April 2014 by a single surgeon. Operative details obtained from rigid urethroscopy were recorded including stricture location, length, quality, and distance from the sphincter. The presence of bladder trabeculations, lesions or prostatic hypertrophy on urethroscopy and urethroplasty findings were also recorded.

Results: Sixty-two urethroplasties were performed including 10 first stage urethroplasties. Rigid ureteroscope urethroscopy was performed in 63% (39/62) of cases. Bladder stones or foreign bodies were noted in three cases with removal prior to urethroplasty. Bladder trabeculations were noted in 4 cases. Prostatic hypertrophy with coapting lobes and a prominent median lobe was noted in one patient. Stricture length, location, and distance from the striated sphincter was noted. Patients with confirmed bulbar strictures > 2cm 39%(24/62) underwent ventral onlay urethroplasty, and patients with distal bulbar or penile urethral strictures 16%(10/62) underwent dorsal onlay urethroplasty. Intraluminal guidewires were inserted at time of urethroscopy in all patients to facilitate urethral lumen identification and urethrotomy. An additional case demonstrated a large false passage which could have been mistaken for a urethral lumen. Subjective assessment of tissue quality surrounding the stricture was noted to be helpful by the primary operating surgeon. Poor quality tissue required dorsal and ventral onlay urethroplasty with plans made for additional graft harvesting.

Conclusions: Rigid ureteroscope urethroscopy with intraluminal wire placement prior to perineal or penile skin incision assists in intraoperative planning and facilitates urethroplasty. Additionally it may add therapeutic information for postoperative symptoms from other urologic problems such as benign prostatic hyperplasia (BPH). It is quick and easy to perform prior to urethroplasty and adds valuable information for the surgeon. We have adopted it as standard procedure for urethroplasties at our institution.

P47

Management of Complicated Ureteric Strictures Post-renal Transplant: Case Series Utilizing Pyelovesicostomy with Boari Flap

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Background: Ureteric strictures are the most common urologic complication following renal transplantation. We review our experience in the management of complicated ureteral strictures refractory to routine endoscopic management.

Methods: A retrospective chart review was performed of our experience from the past 3 years in the management of complicated ureteric strictures post renal transplant. We included all patients that developed ureteric strictures and failed conventional endourologic management strategies. We describe our technique and compare our outcomes to those reported in the literature.

Results: We identified 9 recipients that developed ureteric strictures that failed endoscopic management. Eight of these strictures were managed by pyelovesicostomy utilizing a Boari flap and one without a Boari flap. The average time to ureteric stricture diagnosis was 20.6 months with an average of 5.7 endoscopic procedures prior to open surgery. Average time with stricture to open surgical repair was 62 months. Overall success was 100 % with graft function being salvaged in all cases and no stricture recurrence after an average follow up of 17.2 months.

Conclusions: Complicated ureteric strictures post renal transplant can be successfully managed utilizing various open surgical options. We demonstrate the safety and effectiveness of pyelovesicostomy utilizing Boari flap to treat complex ureteric strictures.

P48

Evaluation of Ejaculatory Function After Urethroplasty: Does Sparing the Bulbospongiosus Muscle Affect the Ejaculatory Outcomes?

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Background: While most outcome data on urethroplasty has focused on durable patency, we aim to evaluate the effect of urethroplasty on sexual function, namely ejaculation. Additionally, it has been suggested that avoiding bulbospongiosus muscle splitting during urethral dissection may lead to improved ejaculatory outcomes. It is our objective to determine the impact of a muscle-sparing versus -splitting technique on ejaculatory function.

Methods: Men undergoing urethroplasty during a 12 month period completed the ejaculatory function component (8 questions, 40 total points) of the validated Male Sexual Health Questionnaire (MSHQ), before and at 4 and 8 months after undergoing urethroplasty. Medical records were reviewed for patient and stricture characteristics and details of procedure performed. Analysis was performed on the entire cohort and subgroup analysis was performed for men undergoing muscle-sparing versus muscle-splitting dissection.

Results: A total of 33 out of 41 men completed the ejaculatory questionnaires (response rate 80.5%). At 4 and 8 months, respectively, 45.2% and 60% of men had improved (as defined by an absolute increase in 5 points from baseline) ejaculatory function after urethroplasty. Mean improvement in score was 5.68 points at 4 months ($p < 0.01$) and 9.6 at 8 months ($p < 0.01$).

The improvement in mean score of 4.22 from 4 to 8 months was also significant ($p < 0.01$). Of 13 patients who underwent muscle-splitting dissection, improvement was experienced by 30.7% and 61.5% at 4 and 8 months, respectively. Of the 20 men in the muscle sparing group, 55.6% showed improvement at 4 months and 65% had improved by 8 months. Though a larger proportion of men in the muscle-sparing group that had improvement at 4 months, this difference was not statistically significant. The rates of improvement in the two groups at 8 months were very similar. **Conclusions:** Ejaculatory function is improved after urethroplasty, with the greatest effect likely secondary to restored urethral patency, though there is continued improvement even after the initial postoperative period. There was a trend towards earlier improvement in ejaculatory function in the muscle-sparing group in this study suggesting an impact of bulbospongiosus preservation.

P49

Robot-assisted Laparoscopic Repair of Vesico-vaginal Fistulas: A Single Center Experience

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Background: Since its first description 9 years ago, the number of published cases of robot-assisted Vesico-vaginal fistula (VVF) repair currently totals only 25. In the largest series so far, we report our experience.

Methods: In this IRB-approved, retrospective chart review-based study, 10 surgeries were performed between Nov. 2010-April 2014 using a 4-arm transperitoneal technique with the daVinci robotic platform. The principles of an open VVF repair were followed and our robot-assisted steps were similar to previous descriptions. In particular, they included placement of a vaginal sponge stick to help maintain the pneumoperitoneum, a vertical incision cystotomy, ureteric catheters/stents placement if necessary, a 2-layered vertical cystotomy closure with a barbed continuous 3-0 suture, vaginal closure with 2-0 barbed continuous horizontal suture, and interposition of a flap of sigmoid colon epiploica, peritoneum, or Evicel® between the bladder and vagina suture lines.

Results: Table 1 describes the patient characteristics. Table 2 outlines our outcomes and compares them to other published series on robot-assisted VVF repair. The cause of VVF was hysterectomy for benign indications in all patients. 3 patients were undergoing repair of a recurrent VVF. 3 and 1 patients required a concomitant robot-assisted ureteric re-implantation and sigmoid colectomy respectively. None of the cystograms showed a

leak. All patients were cured at a mean follow up of 6 months.

Conclusions: Consistent with other reports, our study, which also included concomitant procedures, shows that a robot-assisted approach to VVF repair results in acceptable outcomes. An increasing number of VVF repairs are anticipated to be undertaken with this approach in the future to offer the advantages of a minimally invasive approach to a wider pool of patients with a VVF.

P50

Outcomes of Urethroplasty for Radiation-induced Anterior Urethral Strictures in Men Treated for Prostate Cancer

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Background: While many patients with urethral stricture following radiation therapy (RT) for prostate cancer can be managed with endoscopic techniques, some require urethroplasty. We present experience of urethroplasty performed in the setting of post-radiation urethral stricture following treatment of prostate cancer from two surgeons from two institutions.

Methods: From 2004-2013, 9 men were treated for anterior urethral stricture after RT. Preoperative factors included RT modality, prior treatments, and length of defect. Outcomes included length of stay, recurrence, need for additional procedures and continence status.

Results: All 9 men were treated for anterior urethral stricture. Modality of RT included brachytherapy (2), external beam (3), combination (3), and brachytherapy with salvage external beam (1). Mean length of defect was 5.5 cm (range 3-10). Each patient had at least one prior attempt at trans-urethral management. 7 patients had buccal mucosal graft urethroplasty while 2 had excision and primary anastomotic urethroplasty. 2 patients returned home same day, 6 returned home the following day and 1 patient stayed 2 nights. At a mean follow up of 7.8 months, 2 men had recurrent stricture requiring additional interventions but all 9 were ultimately patient. 7 men remained continent after the procedure, one man remained incontinent and only one man had new incontinence after urethroplasty.

Conclusions: Urethroplasty after RT for prostate cancer is successful in achieving durable patency. In most patients, reconstruction is the definitive step and does not compromise continence.

P51

Open Reconstruction of Recurrent Vesicourethral Anastomotic Stricture After Radical Prostatectomy

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Background: To determine the outcomes of open vesicourethral anastomotic reconstruction (VUAR) for outlet stenosis following radical prostatectomy (RP).

Table 1. P49. Patient characteristics of the present study

Variable	Mean (Range)
Age	45 (32-61) yrs.
BMI	30 (22-42) kg/m ²
Time period (VVF diagnosis to repair)	9 (2-42) months
Previous abdominal surgery (other than hysterectomy)	7/10

Table 2. P49. Outcomes of the present series in comparison with published series

Authors	Yr.	N	Op time	EBL	LOS	Foley	Complications	Cure	Follow-up
Melamud et al	2005	1	280	50	2	14	none	1/1	4 mo
Sundaram et al	2006	5	233	70	5	10	none	5/5	6 mo
Schimpf et al	2007	1	270	0	1	21	NR	1/1	3 mo
Sears et al	2007	1	NR	NR	NR	NR	none	1/1	NR
Gupta et al*	2010	12	140	88	3	14-21	none	12/12	NR
Kurz et al	2012	3	NR	NR	5	14	none	3/3	4-42 wks
Rogers et al	2012	2	NR	NR	2	NR	none	2/2	12 mo
Present series	2014	10	210	69	2	13	Gd1 (1), Gd 2 (1)	10/10	6 mo

Methods: Review of all cases of VUAR within an IRB-approved database was performed. Preoperative factors assessed included cancer treatment modality, duration of symptoms, prior treatments, and length of defect. Outcomes reviewed included length-of-stay (LOS), complications, maintenance of patency, continence, and need for additional procedures.

Results: Twelve cases of VUAR performed by a single surgeon (BJF) from 2004-2012 were identified. Surgical approaches were abdominal (7), perineal (3), or abdominoperineal (2). All patients underwent prior RP, with 25% having subsequent radiotherapy. Among patients with stenosis, 43% were completely obliterated. Two cases had prior anastomotic disruption in the early postoperative period after RP. The median length of stenosis was 2.5 cm (range 1-5 cm) and median LOS was 3.0 days (range 1-7 days). At a median follow-up of 75.5 months (range 14-120 months), 92% of men retained patency; only 25% were continent.

Conclusions: VUAR can restore durable patency for men afflicted with outlet obliteration after RP. Despite anatomic restoration, incontinence is likely.

P52

Bladder Pain Syndrome/Interstitial Cystitis in Males: Clinical Presentation and Correlation Between Symptoms, Cystoscopic and Urodynamic Findings

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Background: Bladder Pain Syndrome/Interstitial Cystitis (BPS/IC) is a chronic inflammation of the urinary bladder with female predominance. Recent studies suggest that BPS/IC is more common in men than expected, and often misdiagnosed as chronic nonbacterial prostatitis. The aim of this study was to review clinical presentation of BPS/IC in men and analyze correlations between the symptoms, cystoscopic and urodynamic findings.

Methods: A retrospective chart review for male patients diagnosed with BPS/IC between 1995 and 2012 was conducted. Univariate Analysis of Variance was used to analyze patient's age and the severity of the presenting lower urinary tract symptoms (LUTS) and their correlation to the severity of the cystoscopic findings. The Spearman coefficient was used to define correlation between the urodynamic parameters, LUTS and the cystoscopic findings.

Results: The study included 75 male patients. The mean age was 45.5 years (SD12.3) (range 22-78). Suprapubic pain/discomfort (SPP/D) was the only symptom that is significantly associated with the cystoscopic grade of BPS/IC ($p=0.030$). There was a significant negative correlation between the maximal cystoscopic capacity and the severity of the incomplete emptying ($p=0.047$), and between the maximal cystometric capacity and nocturia (Spearman's $\rho = -.482$, $p=0.000$). No significant correlations were found between the urodynamic parameters and the cystoscopic findings.

Conclusions: Severity of the SPP/D is significantly associated with degree of glomerulations on cystoscopy. Inverse association was found between the severity of incomplete emptying and the maximal cystoscopic capacity and severity of nocturia and the maximal cystometric capacity.

P53

Urodynamic and Cystoscopy Findings in Men Less Than 50 Years of Age Presenting With Lower Urinary Tract Symptoms

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Background: Lower urinary tract symptoms (LUTS) in young men are often misdiagnosed as benign prostatic hyperplasia or chronic prostatitis. Patients may be subsequently empirically treated without improvement. Through comparison of presenting LUTS with urodynamic and cystoscopy findings we identify the spectrum of underlying voiding dysfunction, and illustrate the clinical utility of combined minimally invasive testing in young men.

Methods: Retrospective analysis was performed on 49 men who all underwent uroflometry, urodynamic studies, and cystoscopy. Patients with neurological disease, urethral stricture, urogenital malignancies, acute urinary

tract infection, and acute prostatitis were excluded. Seventeen patients unable to void or with incomplete data were also excluded. Chi-Square and Fisher's Exact Test were applied.

Results: Median patient age was 43 years (range, 19-49 years). Individual storage and voiding symptoms were identified. Cystoscopy revealed 47% elevated bladder neck, and 33% glomerulations following hydrodistention. Urodynamic studies identified 29% detrusor overactivity, 41% functional outlet obstruction. Anatomical bladder outlet obstruction was identified in 22%. Overall, 59% of patients were diagnosed with overactive bladder, 76% voiding dysfunction, 4% bladder outlet obstruction, and 22% painful bladder syndrome. In 11 (22%) men, the underlying etiology of LUTS was multifactorial. Comparison of presenting symptoms with final diagnoses indicated suprapubic pain was associated with OAB ($p = 0.0273$, OR 3.8182, 95% CI 1.1324 - 12.8739).

Conclusions: Urodynamic studies and cystoscopy are both helpful in identifying the underlying etiology of bothersome LUTS in young men and guiding efficient treatment strategies.

P54

Magnetic Artificial Sphincter (MARS)

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Background: Urinary incontinence can have profound effects on the quality-of-life of affected persons. This abstract introduces a simple yet novel design of a magnetic artificial sphincter (MARS) that may potentially be used for the surgical management of both male and female urinary incontinence as well as fecal incontinence.

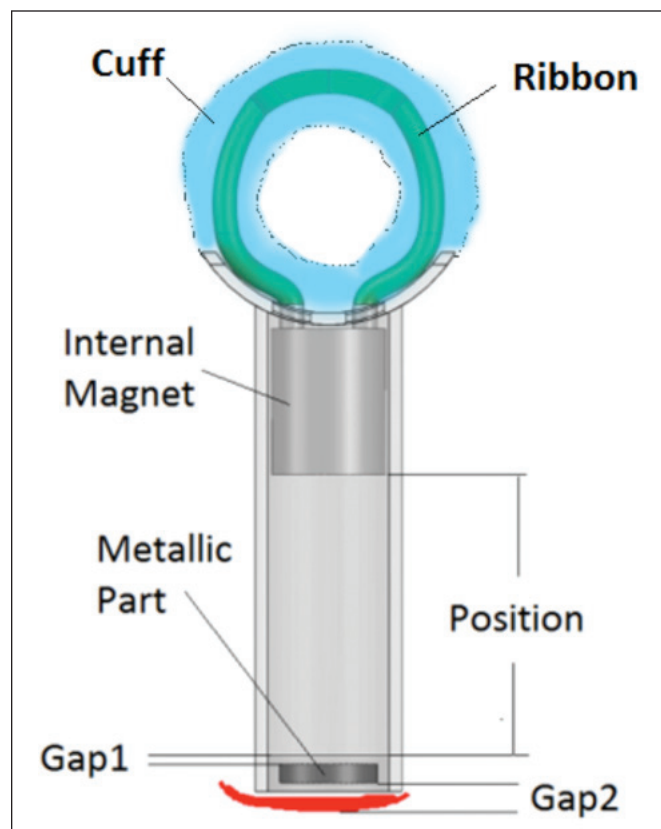


Fig. 1. P54. MARS components.

Methods: The MARS components (Fig. 1) include an internal magnet attached to a flexible ribbon, a collapsible cuff and a metallic component which provides magnetic attraction by an external activating magnet.

Results: The MARS prototype has been developed and tested in vitro successfully. A water column of 60 cm was used for producing the normal pressure in urethra during voiding, and the device could repeatedly open and close the artificial corpus spongiosum without any leakage.

Conclusions: The MARS is simple in design, easy to surgically implant and does not have a reservoir component.

P55

Interim Analysis of the Long-term Efficacy and Safety of Repeated OnabotulinumtoxinA in the Treatment of Overactive Bladder and Urinary Incontinence, Median 2.4 Years' Follow up

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Background: Long-term efficacy/safety of repeated onabotulinumtoxinA treatments were assessed for patients with overactive bladder (OAB) symptoms including urinary incontinence (UI) who had been inadequately managed by an anticholinergic (ACH). The results are from a third interim analysis.

Methods: Patients who completed either of two phase 3 studies could enter a 3-year extension study in which they received multiple onabotulinumtoxinA (100U) treatments. Data were analyzed by treatment cycle. Change from baseline (BL) in OAB symptoms, proportions of patients with a positive response on the Treatment Benefit Scale (TBS; co-primary endpoint), health-related quality of life (HRQOL), duration of effect, adverse events (AEs), and clean intermittent catheterization (CIC) initiation were assessed.

Results: 829 patients entered this extension study; median follow-up was 126 weeks (2.4 years). Discontinuation rates due to AEs/lack of efficacy were low (4.5%/4.9%). OnabotulinumtoxinA reduced mean UI episodes/day (co-primary endpoint; BL=5.55) at week 12 by -3.26, -3.70, -3.87, -3.20, and -3.22 (cycles 1-5, respectively). Improvements in other OAB symptoms and HRQOL (exceeding minimally important differences; $\geq 2.5X$) were consistently observed with repeat onabotulinumtoxinA. Positive TBS responses were reported (74.0, 80.9, 80.4, 79.4, 86.1%). Median duration was 24.0, 31.6, 27.9, 24.3, and 23.9 weeks. Most common AE was urinary tract infection, with no changes in overall AE profile. CIC rates were 4.6, 4.0, 4.3, 4.6, and 2.9%.

Conclusions: Patients with OAB and UI inadequately managed by an ACH showed sustained improvements in OAB symptoms, perception of their condition, and HRQOL after repeated onabotulinumtoxinA treatment, with no new safety concerns.

P56

Salvage Transurethral Injection for Refractory Stress Urinary Incontinence

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Background: There are limited data reporting the use of transurethral injection (TUI) as a salvage procedure in patients who have undergone prior surgery for stress urinary incontinence (SUI). We assessed patient reported outcomes following TUI as a salvage procedure for recurrent SUI.

Methods: TUI was offered to patients with residual or recurrent SUI after failed anti-incontinence surgery. A questionnaire-based study was conducted to assess patient reported outcomes retrospectively with Salvage TUI using Calcium Hydroxylapatite (Coaptite®, Boston Scientific). All patients were asked to complete 4 validated questionnaires. The pri-

mary outcome was the validated single global response assessment question (GRA). Secondary outcomes included the patient-reported percent improvement on a visual analogue scale (VAS), adverse events, opinion whether the patient would repeat the procedure, the UDI-6, and the ICIQ-FLUTS.

Results: Twenty-four patients were identified; 75% responded to the questionnaires. Eighteen patients underwent a total of 29 injections, average 1.5 injections per patient. Seventy-seven percent (77.7%) of patients reported improvement according the GRA, the primary outcome measure (Fig. 1). Regarding secondary outcomes, there was a mean improvement of 75% on the VAS; 29% reported they were 100% improved. Eighty-three percent of patients indicated they would, in retrospect, repeat TUI calcium hydroxylapatite. Patient-reported complications included postoperative urinary tract infection (UTI) in 2/18, short-lived urinary retention 3/18, and severe bladder cramping in 1/18.

Conclusions: Transurethral injection should be considered as a minimally invasive option in complex patients who have failed previous anti-incontinence surgery. Prospective studies would further characterize the results of this intervention.

P57

The Risk of Stress Incontinence and Pelvic Organ Prolapse Surgery After a Pelvic Fracture

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Background: The muscles and ligaments which are essential for continence and the anatomic support of pelvic organs have important attachments to the bony pelvis. Traumatic pelvic fractures can significantly disrupt these attachments, and may cause stress urinary incontinence (SUI) or pelvic organ prolapse (POP). The objective of this project was to assess the incidence of operative treatment for SUI and POP after traumatic pelvic fractures.

Methods: Administrative data from Ontario, Canada was used to identify the patient population, outcomes, and covariates. Female patients who underwent operative repair of a pelvic fracture (which destabilized the pelvic ring and required operative repair) between 2002-2010 were identified using physician billing claims. The co-primary outcomes were the subsequent surgical treatment of SUI, or the surgical repair of POP. To compare the incidence to the general population, patients who had operative repair of a pelvic fracture were matched (1:2) to a patient in the general population who did not have any history of pelvic fracture based on age, provincial location, and propensity score. The propensity score adjusted for the frequency of previous health care contacts, obesity, diabetes, socioeconomic status, ADG comorbidity score resource bands and prior investigations. Cox proportional hazards model was used to calculate an adjusted hazard ratio (HR) to assess risk between exposed and unexposed patients.

Results: We identified 399 female patients who fit our inclusion criteria, and had a minimum followup of 3 years after their pelvic fracture (78% had a disruption of their pubic symphysis, and 22% had a disruption of their sacroiliac joint; all patients underwent surgical repair). The median age was 47 (interquartile range (IQR) 30-67), the majority of patients were urban (85%), and most had high or very high health care utilization for comorbid diseases (51%). The majority of patients had not seen a urologist (73%) or gynecologist (70%) in the year prior to their pelvic fracture. The absolute risk of SUI surgery after pelvic fracture was 3.3% (13/390) compared to 1.0% (8/769) in the matched general population. The adjusted HR for SUI surgery was 5.8 (95% CI 2.2-15.1). The absolute risk of POP surgery after pelvic fracture was 1.8% (7/390) compared to 0.9% (7/769) in the matched general population. The adjusted HR for POP surgery was 2.3 (95% CI 0.9-5.8).

Conclusions: Among patients who had a pelvic fracture requiring operative repair, there appears to be a significantly increased risk of surgery for SUI, but not for POP.

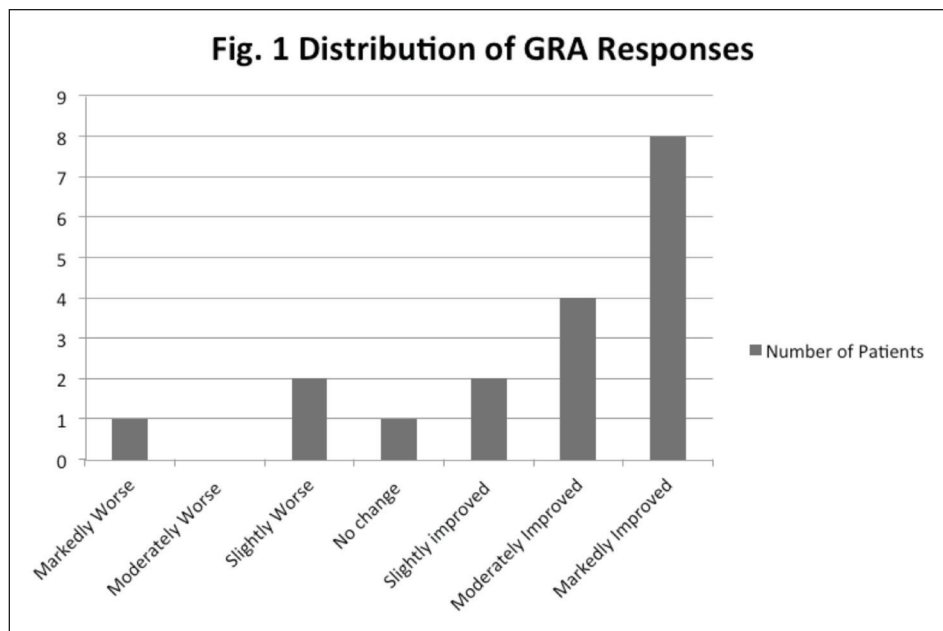


Fig. 1. P56.

P58

Seasonal Variation in Urological Pelvic Pain Syndromes: Seven years of Internet Search Trends.

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Background: Recent publications have validated the use of the analytical tool "Google Insights for Search" which compiles the frequency of Internet search terms in a geographic location relative to overall volumes in that location. Studies from the infectious disease literature have validated this emerging research tool as increased internet search trends have been shown to correlate with in Lyme disease peaks and with viral outbreaks in specific geographic boundaries. Seasonal trends in kidney stone insurance claims are also closely correlated with Google search patterns, as recently published in the journal Urology.

It is often suggested through anecdotal evidence that seasonality can cause flares in pelvic pain syndromes. This study aims to confirm the hypothesis that there is indeed a seasonal variability in symptoms of and prostatitis.

Methods: The search term "interstitial cystitis" (IC) and "prostatitis" were each evaluated through Google Insights for Search for Canada over the period of 2005-2011. New York State was evaluated in a similar way to act as a control for the Canadian data. This data was compared to similar search term "allergies". Interval scale data obtained from the tool was then compiled and analysis was done using a generalized linear model assuming a Gaussian distribution and an identity link. Mean Google trend score was compared across the various groups using a t-test for unpaired data.

Results: Longitudinal graphs of the search term "allergies" over 7 years showed, as expected, statistically significant increase in frequency of search for the month of May ($p=0.001$), and for the season of spring ($p=0.001$). Longitudinal graphs of the search terms IC and prostatitis, however, revealed no obvious pattern. In average monthly searches for prostatitis, no significant year difference was appreciated ($p=0.892$). No significant difference between months, or seasons was demonstrated ($p=0.120$) and ($p=0.446$). The New York data similarly showed no significant month or season differences ($p=0.512$). No significant difference was appreciated in interstitial cystitis between months, seasons or years ($p=0.973$).

Conclusions: There is no seasonal variation in Internet search patterns for

urological pelvic pain syndromes. This study strengthens the stance that IC and prostatitis symptoms are not typically seasonal.

P59

Long-term Rates of Urinary Incontinence Following Treatment of Localized Prostate Cancer: A Systematic Review and Meta-analysis

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Background: Following surgery for localized prostate cancer, the rates of urological side effects, including urinary incontinence (UI), vary widely. This may be a result of the varying definitions used to describe UI. Considering the long life expectancy following treatment of localized prostate cancer, it is important to understand the long-term side effects of treatment. The primary objective of this study was to determine the rate of UI 3 years following surgery for localized prostate cancer. The secondary objective was to assess for differences in the incidence of this side effect based on subjective and objective definitions of UI.

Methods: MEDLINE, EMBASE and the Cochrane Central Register of Controlled Trials were searched for eligible contemporary studies (2009 to 2013). Randomized controlled trials and observational studies were included. The primary outcome was UI three or more years after surgery for localized prostate cancer. Meta-analysis was conducted using a random effects model to pool the proportion of patients with UI and 95% CIs were calculated. The rate of UI based on a subjective versus objective definition was assessed in a subgroup analysis.

Results: Fourteen studies met the inclusion criteria. The pooled rate of UI post-prostatectomy was 9.2% (95% CI 4.3 to 18.6). The pooled rate of UI did not change when 2 studies of laparoscopic and/or robotic prostatectomy were excluded (9.4% [95% CI 4.1 to 20.0]). When UI was defined subjectively, the pooled rate of UI was 15.2% (95% CI 4.7 to 39.5) compared to 7.0% (95% CI 2.6 to 17.2) when UI was defined objectively.

Conclusions: Overall, 1 in every 11 patients are diagnosed with UI following surgery for localized prostate cancer. The rate varies from 1 in 7 with a subjective definition of UI to 1 in 14 with objective definition.

P60

Treatment Selection and Adherence by Patients With Refractory Overactive Bladder

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Background: Over active bladder (OAB) is affecting 16 % of the population, causing significant morbidity in both sexes. The first line therapy, anticholinergic medications, is discontinued in 70% of patients due to side effects or treatment failure. Currently there are three second line treatments for refractory OAB (rOAB): percutaneous tibial nerve stimulation (PTNS), sacral nerve stimulation (SNS) and detrusor neuro-denervation using injections of Botox. The optimal agent among these options and the cross over between these agents is unknown. We reviewed our rOAB cohort for treatment outcomes among these choices with particular attention to cross over events.

Methods: Using our electronic medical records, we identified patients with rOAB who chose to undergo treatment with the second line therapies by a single surgeon after being counseled on all 3 options. Patient charts were reviewed evaluating their original symptoms, clinical progression and patient's adherence to the treatment modality of their choice. Patients treated for indications other than overactive bladder were excluded from our analysis.

Results: Over the past 18 months, 33 patients were treated with second line therapies. We excluded 6 patients with primary diagnosis of urinary retention without obstruction. Of the 8 patients who chose primary Botox therapy, 7 continued with no cross over events and one was lost to follow up after one treatment, mean duration of treatment in months 10 (1-17). Of the 13 choosing primary SNS therapy, 11 had resolution of symptoms and continued with SNS and two crossed over to Botox therapy due to SNS trial failure. Mean duration 7.5 (1-18). Of the 6 patients choosing primary PTNS, 4 had symptom resolution of which 2 crossed over to SNS despite good results, 1 continued with PTNS maintenance and 1 was lost to follow-up. The remaining 2 patients receiving PTNS had persistent rOAB symptoms and are considering SNS. Mean duration 5 (1-10). There was no crossover from primary Botox group to SNS or PTNS, and there was no crossover from primary SNS to PTNS.

Conclusions: In our cohort we show the adherence rate for PTNS is low, compared to primary Botox or SNS. Of the three second line options for management of rOAB, patients continued both primary Botox and SNS and tended to stay with their choice of treatment. Those that started with PTNS often progressed to SNS therapy despite good PTNS treatment outcomes. Prospective study is needed to determine if PTNS is a "gateway" choice to SNS.