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UP-062

Relationship Between Body Mass Index and Overactive Bladder in Woman Correlated with Urodynamic Evaluation

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Introduction and Objective: Overactive bladder (OAB) is a disabling condition affecting health-related quality of life. It is characterized urodynamically by involuntary bladder contractions occurring during bladder filling. In women, studies have shown that the prevalence of OAB symptoms is positively related to higher body mass index (BMI). There has been no published data correlating BMI and OAB in woman using an objective tool. Our objective was to define a relationship between BMI and OAB in women and to correlate it with urodynamic (UD) findings.

Methods: A prospective study was conducted at our Urology out-patient and cystoscopy clinics. Ambulatory females aged ≥ 18 years who had symptoms of OAB ≥3 months were enrolled. Patients answered a self-administered questionnaire (modified Overactive Bladder-Validated 8-question Screener [OAB-V-8]), had their weight and height recorded to calculate the BMI, and underwent video or non-video UD Patients were categorized into 3 groups (G). G 1 BMI < 25 (underweight & normal weight), G 2 BMI 25-29.9 (overweight), and G 3 BMI ≥ 30 (obesity).

Results: A total of 113 patients were examined (G 1 [n=32], G 2 [n=40], G 3 [n=41]). The mean age was 50, 55, and 59 for Gs 1, 2, and 3 ($p<0.05$). G 3 showed a significant increase in the incidence of subjective mixed leakage ($p < 0.05$) and the number of pad used ($p<0.05$) when compared with Gs 1 & 2. There was no significant difference among the Gs in duration of symptoms, OAB-V-8 score and the incidence of subjective urgency or stress leak. UD parameters of Gs 1, 2 & 3 showed no statistically significant differences in most variables including: sensation, compliance, involuntary contractions, pressure amplitude, detrusor leak point pressure, stress leakage, and valsalva leak point pressure. G 3 showed a significant increase in the incidence of UD urge leak ($p<0.05$) when compared to G 2 but not G 1.

Conclusions: Increasing BMI was age related. BMI ≥30 appears to be associated with a higher incidence of patient's reported urinary mixed leakage and pad use. UD assessment did not show significant correlation between OAB and any BMI category for most UD parameters except for urgency leakage. A larger series is warranted in order to define the relationship between BMI and OAB and UD findings.

UP-063

Reservoir through the Inguinal Ring: Safety Considerations dor Men Post-Robot Assisted Radical Prostatectomy

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Introduction and Objectives: Reservoir placement for a 3-piece, inflatable penile prosthesis (IPP) through the external inguinal ring is an accepted and simple technique, performed commonly through the same transverse scrotal (penoscrotal) or infrapubic incision used for prosthesis placement. However, there is an absence of published surgical reports examining whether placing the reservoir through the ring in patients post-robot assisted radical prostatectomy (RP) increases the risk of either immediate or delayed complications. We present a prospective series in which IPP reservoirs were placed through the external inguinal ring.

Methods: Over 42 months (January 2007 to July 2010), 112 men post-robotic RP had a 3-piece IPP placed via a transverse scrotal approach. Reservoir placement was through the external ring via the scrotal incision unless dense retropubic scarring was encountered that prohibited development of an adequate space for the reservoir. In those situations, the reservoir was placed in an ectopic location (between the transversalis fascia and overlying muscle) via the scrotal incision, or a second incision was made and the reservoir was placed under the fascia. Patients were followed at 2 and 6 wks post-surgery, and q6 months thereafter.

Results: Follow-up range was 4-42 months. Reservoir placement was through the ring in 99/112 patients (88%). For 13/112 patients (12%), ectopic placement or a second incision was required. In no case of external ring placement were immediate complications noted, nor at most recent evaluations. There were no bleeding complications.

Conclusions: Placing the reservoir of a 3-piece IPP through the external ring in men who have previously undergone a robotic assisted RP is a safe technique when significant scarring of the retropubic space is not encountered. In those cases, we recommend placing the reservoir either through a second incision or in an ectopic location.

UP-064

Evaluation of the Tensile Properties of the Tvt- O and Sub-Urethral Tape I-Stop® in Long-Term Follow-Up in Vivo Rat Model

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Introduction and Objective: Mid urethral sling became the gold standard of surgical management of stress urinary incontinence (SUI) in women. Tensile properties seem to be important to insure good results. Any new mesh must be compared to a well known polypropylene mesh. I-STOP is a new device recently introduced. We are comparing relative tensile properties overtime of TVT-O and I-STOP in an in vivo animal model.

Methods: 1x2 cm strip of both TVT-O and I-STOP were implanted in the inner part if anterior abdominal wall of 30 female Sprague-Dawley (SD) rats weighing 250-300 g. Six rats were sacrificed at timed intervals: 6 weeks, and 3, 6, 9 and 12 months after implantation. Bose® ElectroForce® BioDynamic® test instrument was used to measured max load of isolated mesh fibers.

Results: See Table 1.

Table 1. TVT-O (blue fibre) TVT-O (white fibre) I-Stop white fiber. UP-064

Time	Average Max Load ± Std Dev [Newton]	Average Max Load ± Std Dev [Newton]	Average Max Load ± Std Dev [Newton]
Control	9.447±0.516	9.9±0.416	6.92±0.272
6 weeks	9.247±0.210	8.31±0.703	6.08±0.555
3 months	8.425±1.342	8.63±0.845	6.817±0.781
6 months	9.033±0.851	7.503±3.112	6.585±0.827

Conclusions: There are no significant differences in tensile properties of the fibers between each group. The tensile strength of the fibers didn't decrease significantly over time up to 6 months. 9 and 12 months data should be mature at the time of presentation.

UP-065

AN Open Label Pilot Study Investigating the Safety and Efficacy of Botox in 20 Female patients with Refractory Symptoms of Overactive Bladder

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Introduction and Objective: Various oral pharmacologic treatments are available for symptomatic overactive bladder (OAB) with or without incontinence, but frequent dosing and significant side effects mean many patients cease therapy. Intravesical Botox® has shown promise in managing incontinent neurogenic and idiopathic OAB in several clinical trials and reduces therapeutic burden. This study sought to assess the use of intravesical Botox® in managing high urinary voiding frequency for patients with OAB without incontinence (dry OAB).

Methods: Twenty outpatient, female subjects between 18 and 75 years of age with OAB for at least 3 months without bladder pain who failed one or more anticholinergic medications and had not been taking anticholinergic medications were enrolled. They were injected via cystoscopy with 100 IU Botox® diluted in 10 mL in a defined 20 site pattern into the detrusor (sparing the trigone). Urinary retention was assessed by demonstrating normal voiding immediately afterwards. Post-void residual (PVR) urine measurements were performed at visit 1 (pre-treatment), weeks 2, 12 and 24. Subjects were followed for one year post-injection.

Results: Overall, 11 subjects completed the trial while 9 did not as 1 did not receive adequate relief, 2 withdrew consent and 6 failed to follow up after month 3 and/or 4. No urinary retention was seen 1 week after PVR. By 1 month post-treatment, the average number of voids over a 3 day period decreased from a baseline of 45 to 30. Urinary urgency severity was measured using the Indevus Urgency Severity Scale (IUSS). Bowker's test of symmetry showed urgency fell from 2.73 to 1.40 after 1 month on a 1 (normal) to 3 (unbearable) scale. Patients improved by 1.77 points on the bladder related quality of life questionnaire. Overactive Bladder Questionnaire (OAB-q) consisted of an 8-item symptom bother scale and 25 health-related quality of life (HRQL) items and 10 of the 11 patients that completed the trial improved from 128.80 to 64.80 within 1 month post-treatment. No significant adverse events were reported during the trial.

Conclusions: Patients completing the study had significant improvement in OAB symptoms, particularly 1 to 3 months post-treatment. Only 1 patient cited inadequate relief upon withdrawal. No significant adverse events and no urinary retention after Botox® treatment occurred. Overall, quality of life improved in patients treated with Botox® for dry OAB, but obtaining data on more patients would be valuable.

UP-066

Evolution of the 'Mummy Wrap' Concept to Separable Component Dressing Facilitates Same-Day Inflatable Penile Prosthesis Discharge, At-Home Scrotal Compression for 72 Hours, and Earlier Normalized Voiding and Device Activation

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Introduction and Objectives: Scrotal hematoma post-IPP surgery is a risk factor for infection and device/pump malfunction. Henry previously described a "Mummy-wrap" to provide more consistent compression, minimize/eliminate use of drains, and allow for patients to have same-day-discharge (SDS) with next day outpatient follow-up (FU).We prospectively evaluated a modification to this technique, which optimizes the patients' ability to maintain the dressing intact for 72 hrs without impeding urinary function, and with minimal discomfort.

Methods: 25 SDS 3 piece IPP patients with modified dressing - MD - (shaft wrap separate from scrotum, catheter and shaft wrap removed early post-surgery)were prospectively compared to 25 overnight stay pts managed with the mummy wrap. Coprimary endpoints were early complications (infection, retention, hematoma, pump site) and patient tolerance of the MD over 72 hrs. Treatment satisfaction data included EHS and IIEF scores.

Results: 24/25 men tolerated the MD for 72 hrs, with one obese pt (BMI 36) having the MD fall off POD 1. All MD patients were catheter-free, discharged within 8 hours of surgery, and no drains were used. One pt returned with retention and was re-catheterized overnight POD 0. There were no scrotal hematomas, and pt devices were activated 2 weeks earlier compared to pre-mummy wrap/MD IPP surgeries. Removal of the shaft dressings prior to discharge did not result in any differences compared to the mummy wrap cohort; pt use of post-operative analgesia was similar across groups. 24/25 MD patients did not undergo any outpt evaluation until 72 hrs post-op, compared to the standard protocol of next-day visit for the mummy wrap. There were no indications for drain placement in either group, nor were there any device-related infections. Treatment satisfaction was similar across groups.

Conclusions: The continued trend toward SDS is necessitated by economics and hospital constraints; early series' demonstrate no increase in patient complications, specifically infection rates. Maintaining scrotal pressure for 72 hrs may provide an advantage to the patient as this tamponade further minimizes hematoma risk. The MD, with shaft dressing removal, allowed for normalized voiding function early post-surgery. Multicenter evaluation of this dressing approach or others in development may identify a role for extended scrotal compression post-IPP surgery.

UP-067

Prospective Determination of Pharmaceutical Sample Use in a Tertiary Care Comprehensive Urology Practice for 184 Consecutive Visits for Patients with Erectile Function Compromise

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Introduction and Objectives: To date, there is no prospective pharmaceutical sample use tracking the use of Viagra (sildenafil), Levitra (vardenafil), and Cialis (tadalafil). There have been legitimate questions raised regarding the use of samples, especially for academic based practices. The field of erectile dysfunction (ED), whether prostate cancer, Peyronie's disease, neurovascular or otherwise in origin, is unique in some fashion as the first-line agents of choice for most patients are the phosphodiesterase-5 inhibitors. There are currently three FDA approved medications, therefore, any analyses for patterns of use is simplified. We report on our prospective data for use of sample medications as part of providing men's urological health care.

Methods: A 6-surgeon tertiary care practice was analyzed. Over thirty difference sampling aspects or inter-relationships were studied prospectively. The university-based practice comprises of 2 urologic oncologists, one trauma and reconstructive expert, one female and artificial urinary prosthetic specialist, an infertility expert with a concurrent interest in ED, and an ED, Peyronie's and penile prosthetic surgeon. Samples data was collected according to surgeon and samples characteristics included type of medication, dose, number of boxes, underlying indication for use, and provision of prescriptions.

Results: A total of 184 encounters with 614 sample boxes given to the patients was analyzed. 88% of samples were provided to the patients by 2 surgeons, both with ED specific expertise. A relationship between prostate cancer and samples was noted, and for these patients, prescriptions were given only 51% of the time during initial consultations, and in follow-up for this group, the same relationship held as prescriptions were given 49% of the time. This particular finding warrants further investigation. Cumulatively, sample distribution totals across all 6 surgeons for ED versus cancer-specific ED reached parity.

Conclusions: Practice-pattern analyses are an important tool for optimizing patient care, resource allocation, and to plan future practice/treatment strategies. This is the first study to prospectively track ED sample

medication use, and has yielded a large data set which identifies post-prostate cancer treated men as primary utilizers of sildenafil, vardenafil, or tadalafil samples.

UP-068

Stress Urinary Incontinence following Holmium Laser Enucleation of the Prostate: Is there a Way to Predict?

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Introduction and Objectives: The aim of our study was to define the high-risk patients to develop SUI, post holmium laser enucleation of the prostate.

Methods: A retrospective analysis of 949 consecutive patients, managed by holmium laser enucleation of the prostate, over 10 years period, by a single surgeon, was done. Patients were divided into 2 groups; group (1) represents cases that didn't develop SUI postoperatively (902 patients) and (2) that developed SUI (47 patients). All preoperative, intraoperative and postoperative clinical variables were collected and correlated with the two studied groups. Statistical analysis was done using median, Mann Whitney test and Fisher Exact test. Multivariate analysis was done using General linear model.

Results: The median age of the patients, pre and post operative PSA, prostate volume and operative time were 70 years, 4.3 ng/mL, 0.6 ng/mL, 81 grams and 96 minutes respectively. Patients' age, pre and postoperative PSA, preoperative medications, preoperative acute retention and the duration of postoperative catheter time were not factors predicting the occurrence of SUI postoperatively (p 0.09, 0.5, 0.06, 0.8, 0.5 and 0.5 respectively). Median prostate volume was 80 and 99.5 grams (p 0.01), operative time 95 and 110 minutes (p 0.01), percentage of reduction of PSA 83% and 91% (p 0.006), for groups (1) and (2) respectively. Presence of D.M was significantly associated with higher incidence of SUI (p 0.001). Using medians of the whole cohort, prostate volume >81 grams, operative time >96 minutes and reduction of PSA >84% were significantly associated with occurrence of SUI (p 0.02, 0.02 and 0.005 respectively). On multivariate analysis; prostate volume > 81 grams, presence of D.M and >84% reduction in PSA value were 3 independent factors significantly associated with SUI.

Conclusion: HoLEP results in SUI at a rate comparable with other surgical techniques for the treatment of BPH. The presence of DM, large prostate volume and a greater reduction in the postoperative PSA are independently associated with a higher rate for the development of SUI. Diabetic patients, especially those with large prostate volume should be encouraged to start Kegel exercises in the immediate postoperative period.

UP-069

Vesicovaginal Fistula Repair – What Is the Optimal Approach?

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Introduction and Objectives: The commonest cause of vesicovaginal fistulas in North America is hysterectomy. Controversy exists regarding the optimal timing of repair and surgical approach. We aimed to review our fistula patients with regard to etiology, perioperative parameters, and outcome of repair.

Methods: 67 fistulas were repaired between 1986 and 2010. Charts were retrospectively reviewed for etiology, location, presentation, previous repair, surgical approach, complications, and cure rate. The abdominal approach involved entering the plane between the bladder and vagina without bladder bi-valving the bladder. Multi-layer closure was performed with omental interposition. The transvaginal approach involved a multi-layer closure with flap interposition as required. Suprapubic tubes were left for 4-6 weeks. The outcome was determined by cystogram and symptoms.

Results: Mean patient age was 44 years. Common causes of fistula were hysterectomy in 50 patients (75%), C-section in 8 (12%), forceps delivery in 2 (3%), and catheter erosion in 2 (3%). Mean fistula size was 8.37 mm. Mean time from fistula occurrence to repair was 8.9 mo. (range 2-22). Fistula location was retro-trigonal in 46 patients (68.6%), trigone in 11 (16.4%), and bladder neck in 8 (12.0%). All patients presented with continuous incontinence. 33 patients (50%) had a previous failed repair. 30 (45%) of the VVF repairs were performed with an abdominal approach and 35 (52%) with a transvaginal technique. Two repairs were combined. Most patients who had failed previous abdominal repairs were able to be closed with a transvaginal approach. Tissue flaps were used in all of the abdominal and combined repairs and most of the vaginal repairs. Overall mean hospital stay was 4.5 days. However, for vaginal repairs the mean stay was 3.08 days versus 6.23 for the abdominal repairs (p<0.0001). Mean follow-up was 40 months. All fistulas were successfully repaired. At follow-up 18 (26.8%) experienced other storage LUTS. 16.4% of patients initiated litigation against a previous physician.

Conclusions: Both approaches are successful but the vaginal approach required shorter hospital stay. Management techniques include multi-layer closure, flap interposition as required, and suprapubic drainage. There does not appear to be a mandatory wait time between time of injury and repair, provided the tissues appear healthy. The litigation rate is high suggesting a profoundly negative impact on quality of life.

UP-070

Temporal Trends in Artificial Urinary Sphincter Implantation and Revision

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Introduction: The rates of revision after artificial urinary sphincter (AUS) implantation are variable. To date few predictors of AUS revision have been found. We report significant predictors on AUS revision in our single surgeon single center experience.

Materials and Methods: Between 1986 and 2010, 144 sphincters were implanted at the University of Montreal Health Center. Patients were divided into four groups according to the year of their AUS implantation Chi square test was used for comparison of proportions and trends over time. Covariates consisted of age, incontinence type, history of radiotherapy, diabetes, overactive bladder or clean intermittent catheterization as well as use of urethral wall stent and year of AUS implantation on AUS revision.

Results: Mean age at sphincter implantation was 64.7 (median: 67). Within the entire cohort, 4 (2.8%), 9 (6.3%), 29 (20.1%), 34 (23.6%), and 67 (46.5%) patients has their sphincter implantation in 1985-1989, 1990-1994, 1995-2000, 2001-2005, >2005, respectively. Median time to primary revision was 2.83 years. Our analysis showed decreasing trends in revision rates according to year of AUS implantation. Specifically patients treated in the most contemporary year quartile had a lower revision rate (13.4%) than patients treated in the most historical year quartile of 1985-1990 (50%, X^2=0.008).

Conclusion: We report decreasing trends in the proportion of sphincter revision according year of AUS implantation. These results can be due to increased surgeon and Hospital volume as well as technological advancements in the design and construction of the AMS 800.

UP-071

A Clinically Relevant Approach For The Diagnosis And Management Of Artificial Urinary Sphincter Complications

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Introduction: There is a debate in the literature as to the approach of artificial urinary sphincter (AUS) complications and its management. Our aim was to improve diagnosis and subsequent management of artificial urinary sphincter complications using the voltmeter to determine the presence of leaks of the various components.

Materials and Methods: From 1992 till 2010 the medical records of 144 men undergoing AUS implantation and revision were reviewed from a single surgeon, single center experience. Clinical indications for revision were divided into four categories, either clinical presentation of infection/

erosion, sudden incontinence, progressive incontinence and difficulty manipulating the pump. Other variables included patient age, history of diabetes, use of clean intermittent catheterization, presence of overactive bladder, use of radiotherapy, date of AUS implantation and revision, presence of a urethral wall stent and volume within the reservoir.
Results: In patients undergoing primary revision, 8 (22.8%), 10 (28.67%), 9 (25.7%) and 4 (11.4%) patients had signs of infection/erosion, sudden incontinence, progressive incontinence and difficulty manipulating the pump respectively. The voltmeter was more often used during revision to assess for leakage when patients presented with sudden incontinence highly suggestive of a malfunction (X^2=0.011). Similarly, AUS revision with the voltmeter was more often used when a low volume within the sphincter system was measured (X^2=0.001) and when revision involved replacement of individual defective components due to reservoir and cuff leaks as well as during addition of a second cuff (X^2=0.002).
Conclusion: In patients with a clinical presentation of mechanical failure, the voltmeter can successfully identify specific components within the AUS system that are defective and avoid unnecessary complete device replacement. Optimal use occurs when a high suspicion of device malfunction exists or when volume within the system is low.

UP-072
Early versus Late Revision for Artificial Urinary Sphincters
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Introduction: Long term success with the artificial urinary sphincter (AUS) is common but device revision and replacement is a reality encountered by the surgeon. There is a paucity of information relating to the clinical implications of the time from implantation to revision in men with AUS. We report the clinical and peri-operative implications of time to revision in men with AUS.
Materials and Methods: The medical records of all patients undergoing AUS implantation and revision from a single center, single surgeon were reviewed between 1992 and 2010. Patient information related to age, history of diabetes, clean intermittent catheterization, overactive bladder or radiotherapy were included in this analysis. All patients received antibiotics the night before the procedure. Preoperative clinical variables included aetiology of incontinence and date of insult (if applicable). The date of AUS implantation, presence of a urethral wall stent, reason for revision, date of sphincter revision, volume within the reservoir, use of a voltmeter and type of revision performed were also included in the analysis. Early complications were defined as a revision within 6 months of implantation and late complications were defined as revisions performed after 6 months of sphincter implantation. Chi square analysis was used to determine significant factors that were associated with either early or late revision.
Results: 144 patients underwent a 2 incision bulbar urethral AUS implantation at the University Of Montreal Hospital Center between 1986 to 2010 by a single surgeon. Primary sphincter revision and secondary revision (>1 revision) were performed in 35 (24.3%) and 25 (17.4%) patients respectively. 8 (23.9%) compared to 25 (71.4%) patients had early and late primary revision respectively. The proportion of patients undergoing early or late revision was statistically significantly related to the clinical indications for revision and the type of procedure performed. Specifically, 37.5% of early revisions were performed because of signs of infection with/without erosion and another 50% of early revisions were due to malfunction of the reservoir compared to only 20% of late revisions performed for infection with/without erosion (X^2=0.009). Cuff revision was performed in only late revisions (24%) and an attempt at partial explantation was more likely to be performed in early revision than late revision (37.5% vs 4.0%; X^2=0.017).
Conclusion: Our low rates of infection and erosion at early revision can be due to the fact that all patients received antibiotics for at least 12 hours before their procedure decreasing the risk of contamination during AUS implantation. The high rate of reservoir malfunction during early revision is worrisome and can be due to either device malfunction or surgical manipulation. The higher rates of partial explantation during early revision can be due to a desire of the surgeon to keep the unit in place for re-revision at a separate time.

UP-073
Usage of the Voltmeter during Aritifical Urinary Sphincter Revision
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Introduction: Long-term success with the artificial urinary sphincter (AUS) is common but device revision and replacement are often needed. While revision surgeries have shown excellent outcomes, identifying the components to repair or replace is important when performing procedures for mechanical AUS complications. We report our experience using the voltmeter as a tool in isolating individual components of the AUS that need to be repaired or replaced during revision.
Materials and Methods: The medical records of all patients undergoing AUS implantation and revision from a single center, single surgeon were reviewed between 1992 and 2010. Patient information related to age, history of diabetes, clean intermittent catheterization, overactive bladder or radiotherapy were included in this analysis. Preoperative clinical variables included aetiology of incontinence and date of insult (if applicable). The date of AUS implantation, presence of a urethral wall stent, reason for revision, date of sphincter revision, volume within the reservoir, and type of revision performed were also included in the analysis. Information on the peri-operative use of the voltmeter was available for all patients included in this study. Chi square analysis was used to determine significant differences between patients who had the voltmeter used during AUS revision.
Results: 144 patients underwent a 2 incision bulbar urethral AUS implantation at the University Of Montreal Hospital Center between 1986 to 2010 by a single surgeon. Primary sphincter revision and secondary revision (>1 revision) were performed in 35 (24.3%) and 25 (17.4%) patients respectively. The voltmeter was utilized in 14 (40.0%) primary revisions and 5 secondary revisions (20.0%). For patients undergoing primary revision, the voltmeter was more likely to be used when patients had a complaint of sudden incontinence as their reason for revision (X^2=0.041), when the volume of the reservoir was low (X^2 =0.001) or when the reservoir or cuff was replaced (X^2=0.007).
Conclusion: The use of the voltmeter is a safe and effective tool that could be used by the surgeon to identify leaks and avoid unnecessary removal of functional components when performing sphincter revision.

UP-074
Determinants of Artificial Urinary Sphincter Explantation
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Introduction: Long term success with the artificial urinary sphincter (AUS) is common but device revision and replacement are often needed. Serious complications can arise that require explantation. There is a paucity of data relating the determinants of device explantation at revision. We present our review of the factors associated with explantation during AUS revision.
Materials and Methods: The medical records of all patients undergoing AUS implantation and revision from a single center, single surgeon were reviewed between 1992 and 2010. Sphincter revision was divided into partial or total explantation and non-explantation. Patient information related to age, history of diabetes, clean intermittent catheterization, overactive bladder or radiotherapy were included in this analysis. Preoperative clinical variables included aetiology of incontinence and date of insult (if applicable). The date of AUS implantation, presence of a urethral wall stent, reason for revision, date of sphincter revision, usage of the voltmeter, volume within the reservoir, and type of revision performed were also included in the analysis. Information on the peri-operative use of the voltmeter was available for all patients included in this study. Chi square analysis was used to determine significant differences between

patients who had the voltmeter used during AUS revision.
Results: 144 patients underwent a 2 incision bulbar urethral AUS implantation at the University Of Montreal Hospital Center between 1986 to 2010 by a single surgeon. 11.4% of patients undergoing primary revision (1 revision) either partial or total explantation. Determinants of partial or total explantation at primary revision included, presence of infection with/without erosion (X^2<0.001) and concurrent use of clean intermittent catheterization (X^2=0.007). Partial explantation conversely to total explantation was performed more frequently within 6 months of AUS implantation (75% vs 0%; X^2=0.028). The voltmeter was never used in the context of explantation (X^2=0.032). Determinants of secondary revision was the presence of infection with/without erosion (X^2<0.001).
Conclusion: The rate of explantation during sphincter revision is low. The surgeon should be prepared for a partial or total explantation when patients present with signs of erosion or infection. Other determinants of sphincter explantation is concurrent clean intermittent catheterization. Surprisingly our cohort all had a total explantation when the revision was performed later than 6 months. This can be due to the inclination of the surgeon to only partially explant when the problem presents acutely after implantation.

UP-076

Testosterone Deficiency Syndrome and Cardiovascular Health: An Assessment of Beliefs, Knowledge and Practice Patterns of General Practitioners and Cardiologists in Victoria, Bc

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Introduction and Objectives: Testosterone deficiency syndrome (TDS) or late-onset hypogonadism is a clinical syndrome marked by symptoms including a reduction in muscle mass and increase in adiposity, decreased sexual function, depressed mood, hot flushes, and fatigue, most often in association with laboratory evidence of decreased testosterone. There is an emerging body of evidence that TDS is an independent cardiovascular risk factor in addition to being a predisposing factor for the development of the metabolic syndrome, dyslipidemia, insulin resistance and type 2 diabetes, hypertension, atherosclerosis, and vascular dysfunction. We sought to assess the knowledge, beliefs and practice patterns of a cohort of general practitioners and cardiologists in Victoria BC with respect to TDS and cardiac health.
Methods: A questionnaire was distributed to all 20 cardiologists and a cohort of 120 family practitioners in Victoria BC. Of the 13 questions, 10 assessed their knowledge and beliefs with respect to TDS and 3 assessed their current practice patterns. Appropriate statistical analysis was undertaken.
Results: Most respondents believed that TDS was medical condition and could have an adverse affect on body composition but a similar majority was unsure to whether it was a cardiac risk factor. While most believed that testosterone replacement therapy (TRT) could improve exercise tolerance, the majority were unsure as to if it was beneficial in patients with congestive heart failure, following myocardial infarction, or to improve myocardial perfusion. Cardiologists were statistically significantly more likely to believe that TRT was not beneficial in preventing recurrent myocardial infarction and improving myocardial perfusion (p=0.0133, 0.00186, respectively). The vast majority (88%) did not screen male cardiac patients for TDS. If a patient was identified as having TDS, only10% of those surveyed would refer to a urologist.
Conclusion: Despite being remarkably common in cardiac patients, both general practitioners and cardiologists lack knowledge as to the significant deleterious cardiovascular effects of testosterone deficiency. In their role as men's health advocates, urologists should consider promoting continuing medical education seminars to inform other relevant medical specialists regarding the correlation between TDS and cardiovascular mortality and risk factors.

UP-077

Incontinence Rates in Men who Fail Active Surveillance for Prostate Cancer

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Introduction and Objectives: Active surveillance for low risk prostate cancer has become an acceptable management strategy. However, a percentage of these patients in active surveillance move on to active treatment. Our aim was to examine urinary incontinence (UI) rates in men who move on to treatment from active surveillance.
Methods: From July 1992 to June 2009, 443 men at our institution entered into active surveillance for newly diagnosed prostate cancer. We reviewed their medical records. The mean age of the entire group was 64.1 yrs old (range 40-80). Their mean PSA was 7.65 (range 0.21-36) and their mean Gleason score was 6.2 (range 4-8). Of these patients on active surveillance, 150/443(33.3%) went on to active treatment. Of these patients, 85 had radiation alone, 48 had a radical prostatectomy (RP), 7 had a RP and radiation, 7 had HIFU alone, 2 had focal ablation and 1 had HIFU followed by salvage RP. Of those undergoing radiation (92 patients), 66 had external beam and 26 brachytherapy.
Results: Prior to active treatment 25/443 (5.6%) patients had UI documented in their history. Of those 25 patients only 3 went on to a RP and all had persistent UI after surgery. 2/25 patients went on to radiation therapy and their UI resolved. After active treatment 14/48 (29.2%) who underwent a RP alone had de novo UI that persisted at a mean of 38.2 months (range 2-140 months) postoperatively. Of these 14 patients, 7 patients (14.6%) had mild or minimal leakage and 7 patients (14.6%) had significant leakage. After radiation therapy alone 2/85 (2.4%) had de novo persistent UI at 25 and 40 months post radiation. Only 1/7 (14.3%) patients that had HIFU alone had persistent UI at 29 months after HIFU. Of the 7 patients that had both a RP and radiation, 2 had persistent significant UI at 40 and 144 months after surgery. One patient that had HIFU and a RP had persistent UI at 14 months post surgery. The 2 patients that had focal ablation were dry.
Conclusions: The UI rates in our cohort of active surveillance patients who move on to active treatment are similar to patients who undergo treatment immediately after prostate cancer is diagnosed. This suggests that active surveillance, as an initial mode of therapy, does not increase the risk of UI if active treatment occurs at a later date.

UP-078

The Effect of a 6fr Catheter on Pressure-Flow Studies in Men Suffering from LUTS

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Background: The pressure-flow study (PFS) is considered to be the gold-standard for the detection of bladder outlet obstruction (BOO) in men suffering from lower urinary tract symptoms (LUTS). The ICS nomogram has been created in order to classified men as being obstructed, equivoqual or unobstructed according to their BOOI (bladder outlet obstruction index). However, several studies have raised the possibility that transurethral catheterization might have an obstructive effect on pressure-flow studies while others did not. Thus, the objective of this study is to evaluate the effect of a 6Fr transurethral catheter on pressure-flow studies and to evaluate its clinical implication.
Methods: This is a retrospective study of 150 men referred for an evaluation of lower urinary tract symptoms and who underwent an urodynamic study. Non invasive free-flow uroflowmetry (UFM) was performed before every urodynamic studies and postvoiding residual urine volume (PVR) was recorded. Cystometrogram (CMG) was then performed using a 6 Fr double lumen transurethral and PVR recorded at the end of the procedure.
Results: The mean age of the population was 63±14 years old. The maximal flow rate (Qmax) was significantly higher (p<0.001) in the free-flow studies (FFS) [15.3mL/s (range 9.5–24.0)] than in the PFS [11.0mL/s (range 6.5-18.6). This difference becomes even greater (-7 mL/s) if we analyze

only the patients (n=37) who voided a volume varying by less than 20% between the free and pressure-flow studies. However, according to the ICS nomogram, 40 men were classified as being unobstructed, 13 as being equivoqual and 30 as being obstructed when findings of the PFS were used while similar results can be found in respectively 45, 15 and 23 men based on the findings of the FFS. Thus, the use of the PFS alone would have resulted in the upstaging of 10% of cases. Paradoxically, only 1 patient would have been downstaged if only the FFS was used.
Conclusion: The presence of a transurethral catheter during PFS negatively affect the maximal flow rate which may results in unnecessary interventions with its ensuing cost and complications. Thus, FFS should be performed before PFS in order the obtained a more reliable Qmax.

UP-079

Female Sexual Function and Fertility Outcome of Adult Married Women with Congenital Adrenal Hyperplasia: A Middle Eastern Cohort

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Introduction: There is a paucity of data on the long term outcome in adult women born with congenital adrenal hyperplasia (CAH). We set out to review the sexual function and fertility of married women treated in our hospital for CAH.
Methods: We reviewed the medical records of women 20 yrs or older with CAH. We identified women who were ever married and conducted a phone interview utilizing the 6-item version of the Female Sexual Function Index (FSFI-6) We compared the scores with age matched normal controls in wedlock. We used the Wilcoxon rank test for analysis.
Results: We identified 45 women with mean age 24.3 yrs (SD 3.8) with CAH. Mean follow up was 23.2 yrs (SD 4.4). Only 5 women were ever married, at a mean age of 18.5 yrs (SD 2) for a period of 5.5 yrs (SD 3.0). Of the married women, one had a Prader gential grade of I-II and 4 patients had grade III-IV. Of these 5 patients, one stage clitroplasty, valvoplasty and vaginoplasty were performed in 3 (60%) at the age of 1.1 yrs (SD 3.3), a deferred vaginoplasty in 1 at the age of 23.8 yrs and no surgery in one. Revision surgery was carried out in 2 patients and repeat vaginal dilation under GA in 4. Married women had menarche at 13.4 yrs (SD 3.3), an average weight of 58.4 kg (SD17.2) and height of 151.4 cm (SD 9.9). Cosmetic genital appearance was good to excellent in all patients. Severe vaginal stenosis was found in 1patient. There was no significant difference between groups in mean age and duration of marriage. There was no significant difference in the FSFI-6 score between the patients (18.6 SD 6.03) and controls (22.6, SD 4.2, $p>0.05$). The patients' score however is below the proposed cutoff of 19 of normal sexual function. There was no significant difference in each domain between groups ($p>0.05$). Four women conceived, 3 unassisted and 3 gave birth to one normal child each by cesarean section and one had an abortion. The mean number of children was not significantly different between patients (0.6 SD 0.55) and controls (1.80 SD 2.4). Two patients were divorced, one within 1yr due to sexual problems and another after 5 years for nonsexual social reasons.
Conclusions: CAH has a significant impact on the sexuality of women in their adult life in our region. Most patients in early adulthood remain single. Few women get married and are able to lead normal sexual life and give birth to normal children.

UP-080

Noctural Penile Tumescence Recording Is Useful to Identify Erectile Dysfunction Etiology for Young Men

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Introduction and Objective: The identification of erectile dysfunction (ED) etiology in young men is not an easy task. Historically, nocturnal penile tumescence recording (NPTR) was used to differentiate psychogenic from organic ED but has also been criticized for being costly, complicated, and with poor reproducibility. In this work we aim to evaluate the potential of NPTR in the diagnosis of ED in young men.
Methods: 40 less than 40 yr old (otherwise healthy) men with no known psychological diagnoses complaining of ED for at least 6 months were included in the study. Hormonal workup was negative. All failed multiple trials of 3 oral phosphodiesterase inhibitors. Color penile duplex ultrasound (CDU) (0.5cc trimix with 30 mg papaverine+10 µg PGE1+ 1 mg phentolamine) did not produce rigid penetration (but was bedroom quality) and revealed degress ofveno-occlusive dysfunction. In-home NPTR was recorded over 2 consecutive nights using the Rigiscan® (Timm Medical Technologies, MN). Presence of 3-6 erectile sessions over an 8-hour sleep, with each session lasting at least 10 min and yielding a penile radial rigidity greater than 70% at the tip of the penis was considered normal erectileactivity.
Results: No technical difficulties were reported for at-home testing. 30 (75%) of men had abnormal test results. However, 10(25%) out of 25 men had completely normal erectile sessions during NPTR; in these men a diagnosis of psychogenic ED seems highly possible.
Conclusions: NPTR still has a role to play during evaluation of erectile function in young men. It can help identify challengingcases of primarily psychogenic ED. We do not recommend routine use of NPTR for ED work-up, and limit use to cases where CDU is inconclusive

UP-081

Do Patients Prefer Being Taught Intermittent Self Catheterisation Pre-Operatively before Intravesical Botulinum Toxin A Injections?

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Introduction and Objectives: Intravesical injections of botulinum toxin A can result in incomplete emptying and retention of urine in approximately 15% of patients. We evaluated patients' opinions and preferences regarding the possibility of being trained to perform self-catheterisation pre-operatively.
Methods: A post-operative questionnaire was devised for patients who underwent botulinum toxin A injections for idiopathic detrusor overactivity. It included information about pre-operative counselling and demonstration of self-catheterisation along with patients' viewpoints concerning these issues. Additionally, patients performing self-catheterisation post-operatively were asked to score their satisfaction with it on a standard visual analogue scale. Data was divided into: group A consisting of patients performing self-catheterisation as a consequence of their therapy and group B of those were not.
Results: See Table 1. The median score for overall satisfaction with self-catheterisation was 5 out of 10.
Conclusion: Preference for pre-operative self-catheterisation training is higher in those performing it post-operatively. Given the possibility of being taught self-catheterisation beforehand, most patients would not decline injections. All patients should be offered self-catheterisation tuition prior to undergoing botulinum toxin A injections. It would be interesting to assess whether satisfaction with self-catheterisation improves in those who receive pre-operative tuition.

Table 1. UP-081

Question	Patients' responses	Group A; n=10	Group B; n=30
Whether demonstrated self-catheterisation pre-operatively?	Yes	6(60%)	2(6.66%)
	No	4(40%)	28(93.3%)
Would prefer pre-operative self-catheterisation training?	Yes	3(30%)	4(13.3%)
	No	3(30%)	12(40%)
	No preference	4(40%)	14(46.6%)
Would refuse injections if shown self-catheterisation pre-operatively?	Yes	0	1(3.33%)
	No	9(90%)	16(53.33%)
	Don't know	1(10%)	13(44.82%)

UP-082

Timing of Repeat Intravesical Botulinum Toxin A Injections for Idiopathic Detrusor Overactivity: Patients' Perspectives

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Introduction and Objectives: Symptom recurrence after intravesical botulinum toxin A for idiopathic detrusor overactivity is common and patients are usually treated with repeated injections. Whilst re-injections are considered equally effective and safe as the first injection, no recommendations have been made regarding the interval between injections. We conducted a survey to obtain patients' views about the timing of repeat injections.

Methods: Questionnaires which focussed mainly on patients' views with respect to repeat injections were designed by the authors. Patients who had repeated intravesical botulinum toxin A injections for idiopathic detrusor overactivity in our centre were identified. All patients from this database were asked to complete the questionnaire. Data was analysed for age, sex, number of previous injections, duration of initial and maximal symptom recurrence and the commencement of supplementary anti-cholinergic medications.

Results: 30 patients completed the questionnaires, 26 female and 4 male. 17 (56.6%) patients had onset of symptom recurrence within 6 months, 7 (23.3%) between 6 to 9 months and 6 (20%) more than 9 months. 10 (33.3%) patients were commenced on anti-cholinergic medications upon recurrence. 17 (56.6%) responded that they would like to have repeat injections as soon their symptoms return, whereas 12 (40%) had no preference. Only one patient stated that they preferred to wait until their symptoms had reached a peak.

Conclusion: Most patients with idiopathic detrusor overactivity prefer to have re-injections of botulinum toxin A at the onset of symptom recurrence. Consideration should be given to open access clinic slots for these patients to allow more efficient re-listing if required.

UP-083

Should Urinalysis Be Routinely Performed prior to Urodynamic Studies?

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Introduction and Objective: Urodynamic studies is an invasive investigation associated with risk of urinary tract infection. We aimed to establish whether routine testing of urine is universally indicated in all patients prior to undergoing urodynamics.

Methods: All patients referred to the urodynamics unit in our department completed a questionnaire prior to the procedure. This included questions regarding the presence of an infection, antibiotic therapy and presence of symptoms suggestive of urine infection. Dipstick urinalysis was performed in all patients immediately before undergoing urodynamic studies. Specimens which were positive on dipstick urinalysis were sent for microbiology, culture and sensitivity and the results recorded. None of the patients had prophylactic antibiotics.

Results: Data was collected from 50 patients (26 males and 24 females). 8 (16%) patients responded that they thought they had a urine infection. 12 (24%) reported symptoms of dysuria and/or frequency, urgency, haematuria and foul-smelling urine. Dipstick was positive in 17 (34%) patients, although only 5 (10%) had a proven infection on urine microscopy, culture and sensitivity. Out of these, 2 (4%) patients had symptoms of infection and were already taking antibiotics, whilst 3 were asymptomatic.

Conclusions: Symptomatic urinary tract infection is present in a minority of patients prior to urodynamics and routine screening with dipstick is unnecessary. Instead patients should be appropriately investigated in clinics to rule out infection as a cause of sensory urgency before being referred for urodynamic studies. At the time of urodynamics, urinalysis should be considered in patients who are suspected to have a urine infection but are untreated.

UP-084

Is the Efficacy and Safety of GreenLight HPS™ Laser Photoselective Vaporization Prostatectomy (PVP) Affected by Age?

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Introduction and Objectives: We evaluate the efficacy and safety of GreenLight HPS™ laser PVP for the treatment of lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH) in patients of different age groups.

Methods: Patients were stratified into two groups: age <70 (group I) and age≥ (group II) years. Transurethral PVP was performed using a GreenLight HPSTM side-firing laser system. American Urological Association Symptom Score (AUASS), Quality of Life (QoL) score, maximum flow rate (Qmax) and post void residual (PVR) were measured preoperatively and up to 36 months postoperatively.

Results: 206 consecutive patients were identified (I: 112; II: 94). Among the preoperative parameters, there were significant differences ($p<0.05$) in prostate volume (I: 63.8±35.0; II: 73.8 ±43.8 mL) and PSA (I: 2.2 ±2.6; II: 2.7 ±2.6 ng/mL), while AUASS, QoL, Qmax and PVR were similar ($p>0.05$). No significant differences ($p>0.05$) in laser utilization, energy usage and operating time were noted. Clinical outcomes (AUASS, QoL, Qmax and PVR) showed immediate and stable improvement from baseline ($p<0.05$) within each group, while no significant differences between the two groups were observed during the follow-up period ($p>0.05$). The incidence of adverse events were low and similar in both groups.

Conclusions: Our experience suggests that age has little effect on the efficacy and safety of GreenLight HPS™ laser PVP.

UP-085

Tadalafil 5 mg Once Daily Improved the Signs and Symptoms of Benign Prostatic Hyperplasia as Early as 2 Weeks

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Introduction and Objectives: Symptoms of Benign Prostatic Hyperplasia (BPH-LUTS) and Erectile Dysfunction (ED) often present together in aging males. This Phase 3 study assessed effects of tadalafil 2.5 or 5 mg daily on BPH-LUTS and erectile function (EF) in sexually active men with both conditions.

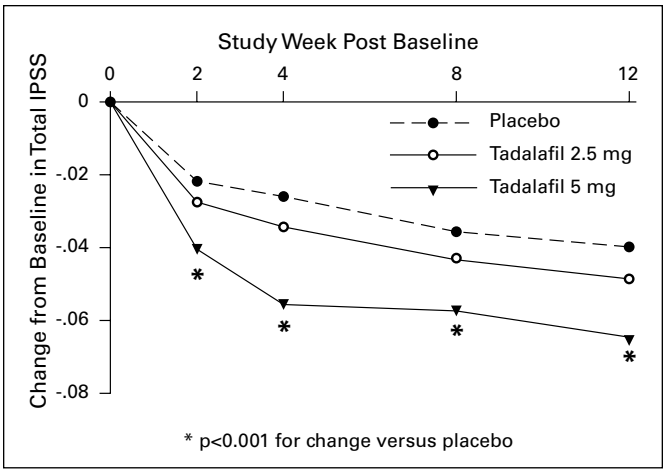

Fig. 1. UP-085

Methods: Men were ≥45 years of age with BPH-LUTS for >6 months and ED for ≥3 months and a total International Prostate Symptom Score (IPSS) ≥13 and peak urinary flow (Qmax) from 4 to 15 mL/s. Following a 4-week placebo run-in, subjects were randomized to placebo (n=200) or tadalafil 2.5 mg (n=198) or 5 mg (n=208) for 12 weeks of double-blinded therapy.

Changes from baseline (randomization) to endpoint (last postbaseline observation) were assessed via ANCOVA and compared to placebo. Co-primary measures were total IPSS and International Index of Erectile Function (IIEF) EF Domain score.

Results: At baseline, mean age ranged from 62.2 to 62.9 years, mean IPSS from 18.2 to 18.5, and mean IIEF EF from 15.7 to 16.6. Both tadalafil groups showed significant improvements in IIEF EF at 4, 8, and 12 weeks (all $p<0.001$; LSmean change at endpoint: placebo, 1.8; tadalafil 2.5 mg, 5.2 and 5 mg, 6.5). For total IPSS, tadalafil 5 mg resulted in significant improvements as early as 2 weeks, and continuing through endpoint (Figure 1; all $p<0.001$); tadalafil 2.5 mg did not result in significant improvements in BPH measures.

Tadalafil 5 mg significantly improved secondary measures of EF at endpoint (Sexual Encounter Profile (SEP) questions 2-5, IIEF Intercourse- and Overall Satisfaction Domains, all $p<0.001$). For secondary BPH measures, tadalafil 5 mg significantly improved BPH Impact Index ($p<0.001$) and IPSS voiding and storage subscores (both $p<0.001$), but not IPSS Quality of Life or nocturia (both $p>0.05$). The adverse event (AE) profile reflected known tadalafil AEs. Discontinuations due to AEs were <3% in any group. There were no clinically adverse changes in orthostatic vital signs, uroflowmetry assessments, or post-void residual volume.

Conclusions: Tadalafil 5 mg was well tolerated and significantly improved total IPSS at 2 through 12 weeks, as well as multiple BPH and EF measures at endpoint.

UP-086

A Novel Topical Therapy Delivery Method for Erectile Dysfunction Drugs

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Introduction: Oral phosphodiesterase 5 inhibitors are first-line therapy for erectile dysfunction. However, they may not be suitable for certain patients due to systemic side effects or lack of efficacy. Intercavernosal injection (ICI) is a highly effective alternative but is limited by high attrition rates amongst patients. Topical therapy is potentially another means of delivering erectogenic agents, however absorption is limited due to the penile skin and the thickness of the tunica albuginea.

Cadherins are a family of adhesion molecules. A novel peptide has been developed to be an E- and N-cadherin antagonist and has many potential clinical applications. Theoretically, this peptide may enhance the absorption of topical drugs. The objective of this study is to investigate the application of this peptide as an absorption enhancer for prostaglandin E1 in the treatment of erectile dysfunction.

Methods: Sprague Dawley retired breeder rats were used to study the effects of the topical enhancer peptide in combination with an erectogenic agent, such as prostaglandin E1 or papaverine. The results were compared with control groups, which receive the peptide only or the erectogenic agent (i.e. PGE1 or papaverine only) applied topically. The study compounds were applied to the glans penis and penile skin, followed by cavernosal nerve stimulation at baseline, 30 and 60 minutes. Intracavernosal pressure (ICP) was monitored as a marker for erection.

Results: In the preliminary studies using PGE-1, there was no increase in ICP compared to baseline stimulation in the PGE1 control, peptide control and treatment. In the studies using papaverine, there appears to be an increase in intracavernous pressure at 30 and 60 minutes after application of the peptide and papaverine mixture, when compared to baseline. In contrast, there appears to be no such benefit in the control groups in preliminary data

Conclusions: This pilot study examines the use of a novel peptide for delivery of erectogenic agents. Initial results are promising and will prompt future investigations. If effective, it can provide a much needed alternative to current pharmacotherapy.

UP-087

A Durable Novel Rat Model for Peyronie's Disease and the Evaluation of the Efficacy and Histologic Cnahges of Repeated Intralesional Verapamil Injections in Peyronies's Diesease

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Introduction: Peyronie's Disease (PD) is a benign disease of localized fibrous plaque formation affecting approximately 5% of the male population with a significant impact on sexual health. While many therapies have been suggested only intralesional verapamil has demonstrated clinical benefits but the histological effects have not been investigated. Further, a durable and practical animal model for further study does not exist. This is a multi-phase study to examine develop a novel model and the response to treatment.

Methods: Our model used intratunical Tromboject (Tj), a sclerosing agent, with transforming growth factor beta-1 (TGFb1), compared to the accepted model of TGFb1 intratunical injections. 22 male Sprague-dawley rats were injected with Tj, TGFb1 or both (9, 3 and 10 respectively) and repeated 1 week later. Rats were then sacrificed at 1, 3 and 6 weeks in the Tj group, 6 weeks in the TGFb1, and 9 weeks in the combined group. The combined group was divided into controls (2), intralesional saline (3) and verapamil (5) therapy performed 3 times per week for 2 weeks. Penile pressure studies and histologic analysis was performed.

Results: Gross curvature was noted at 3 and 6 weeks in the Tj group. The combined controls demonstrated gross curvature and palpable scar at 9 weeks. No difference was seen between controls and saline injection but the verapamil group showed a decrease in plaque size and curvature. Trichrome stains demonstrate increased disorganized collagen most pronounced in the combined group followed by the Tj group and TGFb1 group with significantly improved histologically in the verapamil group

Conclusions: Combination Tj with TGFb1 is a superior model for severe PD in the rat. Plaque formation is more severe, and gross deviations were identified which has not been previously reported. Durability has been demonstrated up to 9 weeks whereas previous models have been shown to resolve spontaneously. Gross and histologic improvements were identified in the verapamil group compared to controls and saline, supporting the pharmacologic role of verapamil and disputing the role of mechanical plaque disruption in plaque remodeling.