

points (mean) from baseline. IPP post Al-Ghorab demonstrate similar device viability, but complementary technical complications. No erosions or early mechanical failures were noted in either group.

**CONCLUSIONS:** In order to minimize iatrogenic injuries, including urethral perforation, a second ventral distal incision allows bilateral access to the corpora, and direct vision incision/dilation. These maneuvers added little to overall surgical times, did not confer additional morbidity, and are a valuable approach in the post T-shunt pt with dilation/corporal snake patient requiring IPP reconstruction. Although distal tunica is compromised at priapism management, no erosion was noted.

**Source of Funding:** None

## 1860

### NOVEL TECHNIQUE FOR SCROTAL PUMP AND INPUT TUBING PLACEMENT IN INFLATABLE PENILE PROSTHESIS

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**INTRODUCTION AND OBJECTIVES:** Multiple modifications have been made to the multi-component inflatable penile prosthesis (IPP) pump design and mechanics but pump placement remains static. Meticulous pump placement and concealment of tubing is essential to ease of use, cosmetic appeal, and patient satisfaction. A novel technique to facilitate reliable and predictable pump and tubing placement is described along with patient outcomes.

**METHODS:** A prospective dual institution study evaluating a novel strategy for pump and tubing placement was performed. All patients were implanted through a peno-scrotal approach, with an IPP manufactured by AMS or Coloplast. Prior to pump placement, the urethral attachments were separated from scrotal tissue using a combination of cautery and blunt dissection, deepening the distance from the skin incision to the point of entry into the scrotum. Next, a 1cm incision was made deep in the midline of the scrotal cavity; the 8cm nasal speculum was then inserted and tilted anteriorly prior to spreading. Using a tubing passer with a 180-degree bend, the reservoir input tubing from the scrotal pump was passed beneath the spermatic cord, advanced superior-laterally along the inguinal cord, and then redirected into the surgical field by piercing the external spermatic fascia. At this point, the nasal speculum was re-introduced into the scrotum and the pump was placed anteriorly deep into the scrotum below the cremasteric muscle and behind the testicles. The scrotal pouch opening was closed with a running suture extending from superficial to deep layers, which mobilizes the input tubing medially and posteriorly to provide additional concealment.

**RESULTS:** From 2002 to 2011, 2515 patients were implanted with an IPP using this method. There were no intraoperative complications with regards to pump or tubing placement. The mean length of follow-up was 9 months from the time of surgery. All patients were able to find and deflate the pump with ease. 3 patients required re-operation to adjust pump position. There were 27 infections, 0 pump erosions, and 2 device malfunctions. No significant differences were seen between device models for implantation. Patients reported 99.9% and 100% satisfaction rates with regards to pump accessibility and tubing perception, respectively.

**CONCLUSIONS:** This novel technique for control pump and tubing placement demonstrates excellent results with safety, efficacy, and patient acceptability. This alternative technique avoids pump migration and tubing visibility, and may be a reliable and cosmetically appealing alternative to conventional implantation.

**Source of Funding:** None

## 1861

### THE IMPACT OF VISUAL INTERNAL URETHROTOMY (VIU) ON SEXUAL FUNCTION

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**INTRODUCTION AND OBJECTIVES:** We prospectively examined the impact of VIU on sexual function.

**METHODS:** Between March 2006 and April 2010, 76 patients treated by VIU were enrolled in this study. Preoperative sexual function was assessed by International Index of Erectile Function-5 (IIEF-5) and Intravaginal Ejaculation latency time (IELT). Nine patients who had IIEF-5 score<17 and IELT<2min were excluded. Sexual function was evaluated by the Korean version of the Male Sexual Health Questionnaire (MSHQ) assessing three sexual functional domains of ejaculation (range: 0-15), satisfaction (range: 6-30), erection (range: 1-35) at preoperative, 3 months, 6 months and 12 months after VIU. We assessed the etiology of stricture, stricture site, stricture length, time of recurrence, duration until first recurrence and compared respective scores for age groups (ranges 40-49, 50-59, 60-69, 70-79 years). Recurrence was diagnosed by retrograde urethrography.

**RESULTS:** A total of 67 men with mean age 57.1 (range 43-77) completed the study. The mean follow-up was 17.5 months (range 12-38). There were no significant differences in erectile function and sexual satisfaction for all age groups, but it improves ejaculatory function in 40-49 ( $p=0.012$ ), 50-59 ( $p=0.018$ ) age groups. The etiology of stricture was traumatic in 23 patients, inflammatory in 14 patients, idiopathic in 25 patients, iatrogenic in 5 patients. Stricture site was bulbous in 25 patients, membranous in 36 patients and multiple in 6 patients. The mean stricture length was  $1.86 \pm 0.93$  cm, the mean time of recurrence was  $1.5 \pm 0.74$  times, the mean duration until first recurrence was  $10.5 \pm 6.72$  months. In univariate analysis, there were no significant differences in satisfaction, erectile function for all various factors. But, shorter length of stricture, smaller times of recurrence and shorter duration until first recurrence improved ejaculatory function ( $p=0.006$ ,  $p=0.005$ ,  $p=0.013$ ).

**CONCLUSIONS:** VIU does not significantly affect erectile function and sexual satisfaction, but it improves ejaculatory function in younger age group. Shorter stricture length, smaller time of recurrence and shorter duration until first recurrence can improve ejaculatory function.

**Source of Funding:** None

## 1862

### SINGLE COMPONENT EXCHANGE DURING PENILE PROSTHESIS REVISION APPEARS TO HAVE HIGHER INFECTION RATES AND LOWER OVERALL DEVICE SURVIVAL RATES THAN COMPLETE COMPONENT REPLACEMENT: A MULTICENTER ANALYSIS

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**INTRODUCTION AND OBJECTIVES:** Anecdotally, many prosthetic urology surgeons have strong feelings about single component exchange versus complete replacement of a three-piece inflatable penile prosthesis (IPP), in terms of infection and device survival rates, but there is a dearth of knowledge in the published literature on the subject. In addition, it is now known that the majority of penile prostheses have culture-positive bacteria at the time of revision surgery, indicating that bacteria probably exists on any IPP components that are retained (J Urol 172: 153). We evaluated infection rates and overall device survival rates, comparing single component exchange and complete replacement of IPPs at the time of revision surgery for non-infectious reasons.

**METHODS:** At 4 institutions, 227 patients with a penile prosthesis underwent revision surgery between November 2000 and April 2011. Strict criteria were utilized. Only patients who were undergoing single component exchange of their existing IPP or complete removal and replacement with a new IPP and had adequate follow-up were included. Patients were excluded if their revision surgery was for infection, erosion, impending erosion, extrusion, hematoma removal, grafting, hydrocapsulotomy, bladder erosion, or concurrent surgeries. Of the 227 patients, 148 (65%) qualified for analysis: 13 in the single component exchange (group 1) and 135 in the complete removal and replacement with a new IPP (group 2). Infection rates and overall device survival rates were calculated by a PhD-level statistician.

**RESULTS:** Though not powered enough for statistical significance, the results trended towards better outcomes with the complete replacement patients (group 2). For overall device survival (any complication), 8 of the 135 (5.93%) in group 2 failed, while 2 of the 13 (15.38%) in group 1 failed, with Fisher's exact p-value = 0.214 and Log-rank test p-value = 0.475. A greater trend towards significance was found when evaluating for infection rates with 5 of the 135 (3.7%) in group 2 becoming infected and 2 of the 13 (15.38%) in group 1 becoming infected, a Fisher's exact p-value = 0.116 and a Log-rank test p-value = 0.254.

**CONCLUSIONS:** Complete penile prosthesis removal and replacement may have lower infection and higher device survival rates as compared with exchange of a single component. A causal factor may be bacteria on the retained component(s). A larger study group is needed to determine statistical significance.

**Source of Funding:** None

## 1863

### THE SPOUSE STUDY- SEXUAL FUNCTION AND QUALITY OF LIFE OUTCOMES IN PATIENTS AND THEIR PARTNERS: SURGICAL VS NON-SURGICAL TREATMENTS

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**INTRODUCTION AND OBJECTIVES:** Few studies have compared satisfaction and outcomes of surgical vs non-surgical treatments in men with erectile dysfunction (ED). Our objective was to prospectively evaluate sexual function, treatment satisfaction and quality of life in men with erectile dysfunction (ED) and their partners after inflatable penile prosthesis (IPP) implantation versus non-surgical treatment.

**METHODS:** Seven sites enrolled patients and their partners in a prospective, multi-national study. After consultation, patients chose to receive a 3-piece inflatable penile prosthesis (IPP) or other ED therapies (Non-Surgery). The International Index of Erectile Function (IIEF), Female Sexual Function Index (FSFI), Bayer Treatment Satisfaction Scale (TSS) and Fugl-Meyer Life Satisfaction questionnaires were completed by couples at baseline, 3, 6, 12, 18 and 24 month visits. Mixed model repeated measures methodology (MMRM) was applied to analyze differences between treatment groups across all visits.

**RESULTS:** 71 couples were enrolled, 22 non-surgery and 49 IPP. Most commonly selected age range was 65-74 years in IPP patients (21, 42.9%) and 55-64 in Non-Surgery patients (9, 40.9%). Duration of ED was over 5 years for 42.9% of IPP patients versus 22.7% of Non-Surgery patients. At 6 months, 34 IPP patients and 36 partners and 8 Non-Surgery patients and partners completed questionnaires; by 24 months 10 and 4 couples responded in these groups, respectively. Between-group IIEF Intercourse Satisfaction, Erectile Function, FSFI Satisfaction and Pain domain scores were statistically significant in favor of IPP, as were TSS Medication Satisfaction scores for IPP patients and their partners. Fugl-Meyer Whole Life, Partner Relationship and Family Life domains were also significantly higher for IPP partners than non-surgery partners. Table 1 shows mean scores for each group in select questionnaire domains.

**CONCLUSIONS:** Female partners had higher satisfaction with their sexual function and quality of life outcomes including partner relationship and family life after their male partners received an IPP compared to partners of non-surgically treated men. Couples who received an IPP were significantly more satisfied with their treatment after implant compared to couples who chose alternative ED therapies.

Table 1: Quality of Life and Treatment Satisfaction Outcomes

Questionnaire Domain	Baseline	6 Months	24 Months	p-value
Fugl-Meyer Whole Life (WL)	-	-	-	-
IPP female partners	4.9	5.1	5.4	0.022*
Non-Surgery female partners	4.8	5.0	5.0	-
IPP patients	5.0	5.1	5.1	0.09
Non-Surgery patients	4.9	4.9	4.8	-
Fugl-Meyer Partner Relationship (RL)	-	-	-	-
IPP female partners	4.9	4.9	5.1	0.011*
Non-Surgery female partners	4.9	4.9	4.0	-
IPP patients	4.6	5.2	4.9	0.981
Non-Surgery patients	5.0	5.1	5.3	-
Fugl-Meyer Family Life (FL)	-	-	-	-
IPP female partners	5.2	5.1	5.6	< 0.011*
Non-Surgery female partners	5.1	5.0	5.0	-
IPP patients	5.3	5.3	5.6	0.395
Non-Surgery patients	5.3	5.1	5.0	-
TSS Completion Confidence (CC)	-	-	-	-
IPP female partners	30.3	63.2	68.2	0.002*
Non-Surgery female partners	29.2	34.4	33.3	-
IPP patients	31.0	62.1	75.0	0.086
Non-Surgery patients	32.7	40.6	53.1	-
TSS Medication Satisfaction (MS)	-	-	-	-
IPP female partners	NA	60.8	65.5	0.041*
Non-Surgery female partners	NA	37.2	45.0	-
IPP patients	NA	68.2	78.5	0.01*
Non-Surgery patients	NA	37.5	38.8	-
IIEF-Erectile Function (EF)	-	-	-	-
IPP patients	7.7	24.5	26.6	0.012*
Non-Surgery patients	10.2	12.4	13.8	-
IIEF- Intercourse Satisfaction (IS)	-	-	-	-
IPP patients	5.3	10.1	11.6	0.013*
Non-Surgery patients	5.9	5.6	3.3	-
IIEF-Overall Satisfaction (OS)	-	-	-	-
IPP patients	4.7	7.4	8.4	0.097
Non-Surgery patients	5.2	5.6	5.3	-
FSFI Satisfaction	-	-	-	-
IPP female partners	2.9	4.5	4.5	0.026*
Non-Surgery female partners	2.9	3.0	3.2	-
FSFI Pain	-	-	-	-
IPP female partners	0.0	6.0	5.6	0.016*
Non-Surgery female partners	6.0	0.0	3.0	-
FSFI Overall Score	-	-	-	-
IPP female partners	17.3	25.8	22.7	0.153
Non-Surgery female partners	21.3	20.6	18.3	-

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