reported the long-term results of currently largest series of patients with ESBD and received AE.

Materials and Methods: The patients with irreversible ESBD and had received AE in Hualien Tzu Chi General Hospital were retrospectively reviewed. Vediourodynamic studies had been investigated in all patients before the AE and at the follow-up. The patients were classified according to the etiologies of ESBD including neurogenic voiding dysfunction (NVD, such as spinal cord injury (SCI) and meningomyelocele) and inflammatory bladder disease (IBD, such as interstitial cystitis, ketamine cystitis, tuberculosis cystitis and eosinophilic cystitis), post pelvic cancer surgery and the others etiologies. The complications of the operation, active lower urinary tract problems and patients self reported satisfaction grading with a 4 point scale (0: not satisfied, 1: mild satisfied, 2: moderate satisfied, 3: excellent satisfied) at follow-up were recorded. The episodes of urinary tract infection (UTI) were also recorded.

Results: A total 102 patients with mean age of 39.4 ± 18.7 years old had been investigated at a mean 78 months follow-up. The cystometric bladder capacity (CBC), compliance, self-voided volume and post-void residual urine in overall patients had significantly increased from before operation to the follow-up. At follow-up, fifty-six patients had spontaneous voiding without any urethral catheterization, fourty-three patients had to perform clean intermittent catheterization (CIC), and 3 patients choose to keep an indwelling urethral catheter. Twenty-nine patients presented with vesicoureteral reflux at baseline, 23 patients had received ureter reimplantation, and only 2 patients still had VUR at follow-up. All the patients with NVD ($n = 45$), IBD ($n = 35$), post pelvic cancer surgery ($n = 15$) and the others etiology ($n = 7$) could significantly improve CBC and compliance at follow up. CIC had to be performed in 33 (73.3%) patients with NVD, six patients (40%) with post pelvic cancer surgery, four (57.1%) patients with the others etiologies and only 2 patients (6%) with IBD ($p < 0.001$). Fifty-four (52.7%) patients had moderate to excellent satisfaction, and the satisfaction rate between different groups did not have significant difference ($p = 0.362$). The most common reason of dissatisfaction was CIC (41.7%), following by urinary incontinence (25.0%) and recurrent UTI (16.7%). Most patients (65.6%) had UTI episodes frequency less than 1 times per year, 30% patients had 1 to 3 times UTI per year and 4.3 % patients had UTI more than 3 times per year. The UTI frequency between different etiologies is not significant, but the patients who had to CIC or indwelling urethral catheter had a higher rate or recurrent UTI. ($p = 0.039$) Bladder stones were found in 5 patients and two patients with IBD developed entero-vesical anastomosis stricture at follow-up.

AE could significantly improve bladder capacity and compliance in the ESBD patients with different etiologies in a long-term follow-up. The satisfaction and complication rate also did not have difference between the patients with different etiologies. CIC had to be performed in most patients with NVD and this is the major reason of dissatisfaction. Recurrent UTI is a common complication and the patients had to perform CIC or indwelling urethral catheter should beware of recurrent UTI.

Conclusion: AE for the patients with ESBD is a safe and effective procedure to improve bladder capacity and compliance. The most common complication is UTI, and the patients should to receive long-term regular follow-up in urology clinic.

Laparoscopy

PD12-4:

THE IMPACT OF DIABETES MELLITUS ON PATIENTS RECEIVING ROBOTIC ASSISTED RADICAL PROSTATECTOMY FOR PROSTATE CANCER

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Purpose: The aim of this study was to compare the early clinical outcomes between diabetic patients and non-diabetic patients receiving robotic assisted radical prostatectomy for prostate cancer.

Materials and Methods: Records were obtained from a review of database for prostate cancer patients receiving robotic assisted radical prostatectomy of Chang-Gung Memorial Hospital, Taiwan, from January 2012 to December 2014. The patients underwent a detailed physical examination and medical history review and were divided into two groups: diabetic group and non-diabetic group. The preoperative variables, intraoperative and postoperative data were compared among the two groups. Their biochemical recurrence free survival and the urinary continence recovery were also taken into comparison.

Results: A total of 363 patients (84 DM; 279 non-DM) were enrolled in our study. Our data revealed that the patients of DM cohort were older in age (68 *vs.* 65 year old, $p = 0.002$) and higher in BMI (26.2 *vs.* 24.8 kg, $p = 0.009$). The DM cohort also had a higher percentage of clinical T3a (35.7% *vs.* 26.5%, $p < 0.001$) and Gleason score 8–10 (26.2% *vs.*14.3%, $p = 0.019$). Intraoperatively, the two groups were similar in regard to operative time, blood loss, hospital stay, transfusion rates, and surgical complication rates. However, the final pathology stage of the DM cohort seemed to be more advanced than that of the non-DM cohort. Although their biochemical recurrence free survivals were similar, the speeds of recovery from urinary incontinence were quite different. The continence rate of DM group over post-OP 3 months, 6 months, and 12 months were 30.9%, 45.0%, and 62.8%, respectively, while the non-DM group were 43.0%, 66.5%, and 94.9%, respectively ($p < 0.001$).

Conclusion: Among the prostate cancer patients receiving robotic assisted radical prostatectomy, the DM group had a more advanced T stage compared to the non-DM group. Their urinary continence also recovered more slowly.

PD12-5:

THE SAFETY OF EN-BLOC-RESECTION OF RENAL PEDICLE DURING LAPAROSCOPIC NEPHRECOTMY AND NEPHROURETERECTOMY

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Purpose: As a previous perception, renal hilum en bloc ligation may increase the risk of renal arteriovenous fistula (AVF). We evaluated the safety and effectiveness of en bloc ligation of renal pedicale using endo-gastrointestinal anastomosis stapler (endo-GIA) during laparoscopic nephrecotmy and nephroureterectomy.

Materials and Methods: Medical records were reviewed of 243 patients underwent laparoscopic nephrecotmy and nephroureterectomy from January, 2002 to May, 2015. Preoperative evaluation include estimate blood loss (EBL), operative time (OP time), the method to ligate renal pedicle (en bloc versus separate) are documented. Comparison of EBL and op time are only performed among patients received laparoscopic nephrectomy. Postoperative evaluation include newly diagnosis of heart failure and we also use the CT (computerized tomography) scan for evaluating the possibility of formation of AVF.

Results: Average age of our patients was 65.42 years (range 12 to 89 yrs) including nephrectomy: 80 patients; nephroureterectomy: 143 patients; nephroureterectomy plus cystectomy: 19 patients. 103 patients have adequate out patient clinic medical records for evaluation and the mean follow-up is 5.3 months (1938.7 days, 15–6033 days). 70 patients have accurate record for the method of renal hilum ligation. (Group A: en bloc, $n = 58$; Group B: separate, $n = 12$) Among these two groups, there are no significant deference in EBL ($p = 0.343$) and OP time ($p = 0.635$). In our follow up, only 4 patients have newly diagnosis of heart failure. One of them eventually loss follow-up. The rest of 3 patients have no evidence of AVF formation under image and physical examination.

Conclusion: En bloc ligation of renal pedicle during laparoscopic nephrecotmy and nephroureterectomy using endo-GIA is safe with no evidence of AVF formation with average follow up for 5.3 months (longest follow-up for 20 years)

PD12-6:

SHOULD WE SHIFT TO RETZIUS-PRESERVING ROBOTIC ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY?

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Purpose: Some studies reported a comparable oncological outcome and better early continence rate of Retzius-preserving robotic assisted laparoscopic radical prostatectomy (RALP). We want to compare the early perioperative and continence outcome. And we are also eager to know if the learning curve of Retzius-preserving surgery would compromise the outcome or not?
Materials and Methods: We selected patient with organ-confined prostate cancer ($\leq$ cT2c), PSA $\leq$ 40, Gleason score of biopsy $\leq$ 8, prostate volume $\leq$ 50 ml and BMI < 35. We design a case control matching study with 20 cases of each Retzius-preserving RALP and conventional RALP group. Postoperative parameter and early continence result was compared.
Results: From Febuary, 2015 to Febuary, 2016, total 84 cases of RALP were performed in VGHTC. Twenty of them underwent Retzius-preserving RALP. There is no statistical difference of preoperative characteristics. There were no significant differences in estimated blood loss, mean length of hospital stay, intra- and postoperative complication rates, pathological stage of disease, Gleason scores, tumour volumes and positive surgical margins between the conventional RALP and Retzius-sparing RALP groups. However, console time, Vesicourethral anastomosis time were longer for Retzius-sparing RALP. There is no significant difference of early continence at 4 weeks between two groups.
Conclusion: Based on the early result of this study, Retzius-preserving RALP is a feasible and safe treatment choice for localized prostate cancer. Both console time and anastomosis time are favoring to conventional RALP.

Podium-13
Other

PD13-1:
SPOCK1 EXPRESSION PREDICTS PROGNOSIS IN PROSTATE CANCER

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Purpose: Prostate cancer is a common cancer and it can often be treated successfully. The 15-year survival rate is more than 90% in patients with early stage, However, once the tumor metastasis occurred, the prognosis got significantly worse. Therefore, to identify patients with malignant potential while diagnosing might improve clinical outcome. The aim of this study was to evaluate the expression of SPOCK1 (sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 1) and its clinical significance in prostate cancer.
Materials and Methods: SPOCK1 expression was measured by immunohistochemical staining of samples from 71 patients with prostate cancer. The correlation between SPOCK1 expression and clinicopathological features was quantitatively analyzed. The prognostic value of SPOCK1 for overall survival was determined by Kaplan-Meier analysis and Cox proportional hazard models. For underlying molecular mechanism, prostate cancer cell lines were used and SPOCK1 expression was knock-down via siRNA. Migration and invasion assay were performed to determined the tumor malignancy. The downstream signaling pathway will be analyzed with real-time RT-PCR and western blot.
Results: Seventy-one patients with mean age of 74.4 years (range 59 to 97 years) were included. Clinicopathological features, including histological type, differentiation, lymph node metastasis, TNM stage, and tumor size were assessed. Patients with high SPOCK1 expression were more prone to be advanced stage. As to the prognosis, the median follow-up for overall survival was 5.2 ± 2.9 years (range: 0.7 to 11.8 years). Moreover, a high POCK1 expression level was correlated with poor survival. The underlying mechanism is under investigation.
Conclusion: Our results suggest that SPOCK1 expression is enhanced in prostate cancer. High SPOCK1 expression, either alone or in combination with other pathologic staging factors, may therefore serve as a poor prognostic marker for prostate cancer.

PD13-2:
PATIENT-SPECIFIC VERSUS NON-PATIENT-SPECIFIC ALERTS IN DECISION SUPPORT SYSTEM TO PREVENT CONTRAST-INDUCED NEPHROPATHY: A RANDOMIZED CONTROLLED TRIAL

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Purpose: Physicians ordering contrast imaging should identify patient risks and prevent contrast-induced nephropathy (CIN). Our aim is to determine whether patient-specific or non-patient-specific alerts in clinical decision support system triggers higher compliance with guidelines to prevent CIN.
Materials and Methods: A 3-arm cluster randomized controlled trial was conducted in two university hospitals using the same computerized physician order entry. Eligible physicians were randomized to receive patient-specific alerts, non-patient-specific alerts or no intervention (groups 1–3 respectively). Patient-specific alerts automatically prompted only when CIN risk was encountered and provides patient-specific data to physicians, while non-patient-specific alerts always prompted regardless of risk without providing patient-specific data. CIN risk was stratified as high-risk, low-risk and minimal-risk according to patient's renal function. Contrast imaging order-cancellation rate was measured as primary outcome.
Results: Orders for 5372 patients from 99 physicians were analyzed. Renal function and risk distributions of patients were not statistically different among groups. Order-cancellation rates were 32.1%, 14.3%, 1.7% for high risk patients, and 7.2%, 3.0%, 1.3% for low risk patients in groups 1–3, respectively. Using generalized linear model, significant order-cancellation factors in at-risk patients were non-patient-specific alert ($p = 0.04$), patient-specific alert ($p < 0.0001$), high CIN risk ($p = 0.003$), and physicians with low contrast imaging ordering volume ($p < 0.0001$). Order-cancellation effects were compared and measured by odds ratio (OR). For high risk patients, patient-specific versus non-patient-specific alerts OR was significant at 2.73 (95%CI 1.09–6.84), while patient-specific vs. control OR = 28.32 (95%CI 3.21–249.65), and non-patient-specific vs. control OR = 9.17 (95%CI 0.96–87.55).
Conclusion: Patient-specific alert significantly outperformed non-patient-specific alert in physician compliance with guidelines.

PD13-3:
CLINICAL OUTCOME OF AUGMENTATION ENTEROCYSTOPLASTY FOR PATIENTS WITH KETAMINE-INDUCED CYSTITIS

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Purpose: To analyze the clinical outcome of patients with KC managed with augmentation enterocystoplasty (AE).
Materials and Methods: We retrospectively collected and analyzed the medical records and video-urodynamic (VUD) test results of 26 patients who underwent AE as treatment for refractory KC during the period 2009–2014. Data from VUD studies performed before AE and 3–6 months after surgery that were analyzed in this study included cystometric bladder capacity (CBC), post-void residual (PVR) urine volume, maximum urinary flow rate (Qmax), voided volume and bladder compliance. A self-report questionnaire was used to assess patient satisfaction with AE.
Results: Patients included 14 women and 12 men aged 20–43 years (mean age, 28.5 years) with an average duration of ketamine abuse of 4.7 years (range, 1–7 years). All patients had contracted bladder, 9 had hydronephrosis and 10 had vesicoureteral reflux (VUR). There was significant improvement in CBC (52.7 ± 29.7 v 327 ± 69.4 mL, $P < 0.0001$), Qmax (6.94 ± 4.32 v 13.7 ± 4.96 mL/s, $P < 0.0001$), PVR (8.08 ± 19.2 v 82.6 ± 91.5 mL, $P < 0.0001$), voided volume (44.1 ± 28.3 v 250.7 ± 133.4 mL,