

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 February, 2015 to February, 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 hydro-nephrosis 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,

$P < 0.0001$) and bladder compliance (11.1 ± 11.9 v 54 ± 43 , $P < 0.0001$) after AE. Hydronephrosis resolved in 7 patients after AE and VUR resolved in all patients who underwent AE with ureteral reimplantation. Perioperative complications included postoperative intestinal obstruction in one patient, short-term urine leakage in one patient and dysuria due to narrowing requiring transurethral incision of the enterovesical anastomosis in two patients. There were no cases of urosepsis and no deaths in this series. All patients who stopped using ketamine were free of bladder pain post-operatively. However, 10 patients who reused ketamine had recurrent bladder pain and recurrent urinary tract infection.

Conclusion: AE is effective at treating KC-induced bladder pain and restoring normal lower urinary tract function. However, absolute cessation of ketamine is the key to success in KC treatment.

Renal transplantation

PD13-4:

PERIPHERAL BLOOD-DERIVED ENDOTHELIAL PROGENITOR CELL THERAPY PREVENTED DETERIORATION OF CHRONIC KIDNEY DISEASE IN RATS

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Purpose: This study tested the hypothesis that peripheral blood-derived endothelial progenitor cell (PBDEPC) therapy can impede the deterioration of chronic kidney disease (CKD) induced by 5/6 nephrectomy in rats.

Materials and Methods: Adult-male rats ($n = 30$) were equally categorized into group 1 (sham control), group 2 (CKD only) and group 3 [CKD + PBDEPC (left intra-arterial (3.3×10^5) and penile vein (6.7×10^5) injections by day 14 after CKD induction)].

Results: By day 60, kidney blood flow (KBF) was significantly lower in group 2 than that in groups 1 and 3, and significantly lower in group 3 than that in group 1, whereas the levels of serum creatinine, and kidney injury score and size showed an opposite pattern compared to that of KBF among all groups (all $p < 0.001$). Protein expressions of apoptotic (caspase 3, PARP), inflammatory (TNF- α , MMP-9), oxidative-stress (oxidized protein, NOX-1), fibrotic (Smad3, TGF- β), and hypoxic/ischemic cell-stress (HIF-1 α , p-Akt) biomarkers showed an opposite pattern, whereas angiogenesis at protein (eNOS, CD31) and cellular (CD31+, CXCR4+) levels showed an identical pattern compared to that of blood flow in all groups (all $p < 0.01$). Other pro-angiogenic biomarkers (SDF-1 α , CXCR4, VEGF) at protein and cellular levels and antioxidants (HO-1+, NQO 1, GR+) at cellular level showed progressive significant increase from groups 1 to 3 (all $p < 0.001$).

Conclusion: The results support that PBDEPC therapy effectively inhibits the propagation of CKD and the deterioration of renal function through enhancement of angiogenesis, blood flow, and anti-oxidative capacity as well as suppression of inflammation, oxidative stress, apoptosis, and fibrosis in a rodent model.

Other

PD13-5:

DURATION OF KETAMINE ABUSE WAS ASSOCIATED WITH LOWER URINARY TRACT SYMPTOMS AND LOW MOOD

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Purpose: This is the first report on the relationship between duration of ketamine abuse and lower urinary tract symptoms and low mood in young adults.

Materials and Methods: After obtaining IRB approval, a structured questionnaire was distributed to young adults who were caught by policemen for using ketamine and were asked to attend educational course in Nov., 2015 and Feb., 2016.

The questionnaire consists of duration and dose of ketamine abuse, International Prostate Symptoms Score (IPSS), short form International Inventory for Erectile Function (IIEF-5), female sexual function index (FSFI) and brief score of mood (BSRS-5). Mild, moderate and severe depression is suspected if BSRS-5 sum score are 6–9, 10–15 and 15–20, respectively.

Results: Of 130 persons 14 (11.8%) refused to fill questionnaire. Mean age of the 116 persons was 27.1 ± 4.4 years. Education level of high school or under was 81%. Mean duration of ketamine abuse in 84 persons was 24.5 months. Duration of abuse was < 12 months in 32 (38.1%), 12–24 months in 27 (32.1%) and > 24 months in 25 (29.8%). Duration of ketamine abuse was positively related to IPSS score ($p = 0.05$) and BSRS score ($p = 0.037$). Erectile dysfunction was noted in 19 (28.2%) of 60 male abusers. Dose of ketamine abuse was not associated with IPSS or BSRS.

Conclusion: Most ketamine abusers were male with low educational levels. Duration of ketamine abuse was associated with lower urinary tract symptoms and low mood. In addition, erectile dysfunction was frequently observed in ketamine abusers.

PD13-6:

INVESTIGATION OF DIFFERENCE OF PERCEPTION BETWEEN DOCTOR AND PATIENT IN PHYSICIAN-PATIENT RELATIONSHIP FROM PERSPECTIVE OF MULTICULTURISM

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Purpose: Information asymmetry and universalism of medical profession in physician-patient relationship (PPR) have long been used to explain problem of doctor-patient communication. The picture of short period of visit and too many professional terms applied are always shown in out-patient service. In fact, from the perspective of multiculturalism, doctor and patient communicates with each other involving “subject with multiple identities”. In this study, difference of perception of PPR between doctor and patient is taken into consideration to investigate the PPR from perspective of “medicine of sociology”.

Materials and Methods: The measurement of quality of medical service for PPR in this study is derived from the gap model of PZB. Five domains of which consists in questionnaire are subjectivity, power/knowledge, ethic of responsibility, ethic of care and literacy of multiculturalism, respectively. The data were collected by face to face interview in one regional teaching hospital in Kaohsiung city. 150 patients of out-patient department and 15 doctors whose various specialist is physician, surgeon, gynecologist and pediatrician enrolled in this study. From perspective of multiculturalism, statistic analysis by SPSS is performed to investigate the effect of difference of perception in PPR.

Results: Domains of ethic of responsibility and care, subjectivity, and skills of literacy of multiculturalism have significant influence on difference of perception in PPR.

Conclusion: Effectiveness in shortening the difference of perception in PPR to achieve improved PPR is to be determined. In addition to hardware facilities and medical profession, inter-subjectivity between patient and doctor interaction, care and literacy with humanity remained important components to construction satisfied PPR. Further, by development in praxis and focus on trend of multiculturalism, imbalanced PPR may find the way out.