Conclusion: Learning curve for every 200 cases of RALP showed significantly less blood loss and blood transfusion rate. The keys to prevent complication was preoperation evaluation meticulously and a dedicated robotic team to do RALP intraoperatively. Early diagnosis and management of complication is paramount in patients have any deviation from the normal postoperative course and clinical care pathway.

PD5-6: "ROBOTIC-ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY FOR PREOPERATIVELY SUSPICIOUS PROSTATE CANCER PATIENTS IN EXPERIENCE OF 50 CASES— IS A NOVEL INDICATION FOR ROBOTIC SURGERY?"

Yen-Chuan Ou M.D., Ph.D., 1 Chun-Kuang Yang M.D., 1 Kuangh-Si Chang, 2 John Wang M.D., 1, Siu-Wan Hung M.D., 1, 3 Division of Urology, Department of Surgery, Taichung Veterans General Hospital, Taichung, Taiwan; 2 Department of Research, Taichung Veterans General Hospital, Taichung, Taiwan; 3 Department of Pathology, Taichung Veterans General Hospital, Taichung, Taiwan; 4 Department of Radiation, Taichung Veterans General Hospital, Taichung, Taiwan

Purpose: To report the experience of 50 cases of robotic-assisted laparoscopic radical prostatectomy (RALP) by single surgeon (YCOU) for suspicious prostate cancer preoperatively.

Materials and Methods: Prostate cancer was suspected and RALP was performed in 50 cases from Feb. 2012 to March 2015. The mean age was 64.21-year-old. The PSA level range 2.5-75 ng/dl (mean: 15) preoperatively. Transrectalsonoguiding biopsy (TRUS) of prostate was done in 41 (82%) cases (once: 26 cases, twice: 12 cases and four times: one case) and 9 (18%) cases didn’t receive biopsy preoperatively. TRUS pathology revealed prostatic intraepithelial neoplasia (PIN) in 5 cases (high grade: 3, low grade: 2), atypical hyperplasia in one case and nodular hyperplasia (with or without inflammation) in 35 cases. All patients have lower urinary tract symptom (LUTS). MRI was performed in 45 cases and showed prostate index (PI)-Rad grade III in 36 cases and PI-Rad grade IV in 9 cases. Patients with full understanding signed informed consent for robotic radical prostatectomy before operation after discussion with operator.

Results: Operation parameters included console time 112.6 min, blood loss 92.6 ml and the mean prostate volume was 63.69 ml. No blood transfusion in all patients. Two Clavien system, grade I complications (leus in one case and intraoperative urinary bladder perforation with repair in one) was noted. Whole-mount step section of prostate pathology disclosed adenocarcinoma in 19 cases (38%), PIN (high grade: 6, low: 5) in 11 cases, atypical hyperplasia in 4 cases and nodular hyperplasia (with or without inflammation) in 16 cases (32%). pT2 in 13 cases and pT3 in 6 cases was found. Two positive surgical margin in two cases. Nineteen cases of prostate cancer showed Gleason score (GS) 5 in 3 cases, GS 6 in 9 cases, GS 7 in 6 cases and GS 8 in one case. The tumor volume ranged 0.1 ml to 14.8 ml with mean 3.59 ml. The tumor percentage in whole prostate was 8.2% (0.1%-65%). Preoperatively urodynamic study revealed voided urine volume (VV) 208 ml, maximal/mean flow rate 10.85/4.5 ml/sec and post-void residual urine volume (PVR) 72.42 ml. Postoperatively urodynamic study revealed voided urine volume (VV) 234 ml, maximal/mean flow rate 20.66/11.4 ml/sec and post-void residual urine volume (PVR) 9.36 ml. The international prostate symptom score (IPSS) was statistically significant reduced from 19.82 to 2.67 and also bother score decreased from 4 to 0.125. All patients experienced continence of urination in mean 10.7 post-operative day (POD) (POD 0-40). Two patient with biochemical recurrence (BCR) was noted.

Conclusion: Robotic-assisted laparoscopic radical prostatectomy for suspicious prostate cancer preoperatively and moderate LUTS disclosed 38% with adenocarcinoma and 30% of PIN or atypical hyperplasia. The subset of those patients have most satisfactory outcome. It is a novel application for robotic surgery.

Podium-6 Other

PD6-1: THE RELEVANCE OF IMMUNE RESPONSES ON PARTIAL BLADDER OUTLET OBSTRUCTION AND REVERSAL

Wei-Yu Lin 1,2,3, Yi-Pai Lin 1, Li-Ying Huang 1, Robert M. Levin 4, Miaw-Ling Chen 1; 1 Division of Urology, Department of Surgery, Chang Gung Memorial Hospital, Chia-Yi, Taiwan; 2 Chang Gung University of Science and Technology, Chia-Yi, Taiwan; 3 Chang Gung University, Taoyuan, Taiwan; 4 Stratton VA Medical Center, Albany, NY, USA; 5 Department of Nutrition and Health Sciences, College of Health Science, Innove Research Center of Medicine, Chang Jung Christian University, Tainan, Taiwan

Purpose: Partial bladder outlet obstruction (PBOO) causes tissue inflammation, significantly increased systemic oxidative stress markers, and the proliferation of circulating myeloid-derived suppressor cells. Since these systemic immunologic responses are associated with PBOO, this study investigated the regulatory mechanism of inflammation and helper T cells.

Materials and Methods: Surgical PBOO was performed in four groups of rats, including control (C), obstruction at 2 (O2) and 4 (O4) weeks, and at 4 weeks after relief of PBOO (R4) (n = 6 each). Levels of urinary prosta-glandin metabolite (PGEM), expressions of inflammatory cytokines (IL-6 and IL-17) in the bladder, and levels of peripheral blood regulatory T cells (Treg cells) and TGF-β1 were assessed by immuno-histochemistry, flow cytometry, or ELISA.

Results: Levels of urinary PGEM, bladder IL-17, and peripheral Treg cell (Foxp3) and TGF-β1 all significantly increased at 2 and 4 weeks after PBOO. PGEM, IL-17, and Treg cells (Foxp3) were down-regulated after relief of PBOO, while TGF-β1 level further increased.

Conclusion: Transient PBOO triggers an acute, reversible increase in inflammatory cytokines and Treg. The distinct dynamics of individual inflammatory markers suggest that they may be potential parameters for monitoring bladder inflammation.

Renal transplantation

PD6-2:

EVALUATION THE RELATIONSHIP AND POST-OPERATIVE GFR BETWEEN THE LIVING DONOR AND THE RECIPIENTS IN KIDNEY TRANSPLANTATION

Guang-Heng Chen, His-Hsien Wang, Po-Jen Hsiao, Yi-Huei Chang, Shen-Wei Li, Chi-Ping Huang, Hsi-Chin Wu, Chao-Hsiang Chang. Department of Urology, China Medical University Hospital, Taichung, Taiwan

Purpose: This study evaluate the relationship and post-operative GFR between the living donor and the recipients in kidney transplantation. A 5-year review of living donor renal transplants in a single transplant center was performed.

Materials and Methods: Between January 2010 until February 2015, a total of 49 living donor KT were performed at China Medical University Hospital. Relationship between donor and recipient and graft survival and changes in GFR during a 5-year period in a single center were retrospectively analyzed.

Results: These 49 living donor kidneys transplants represent 52% of all transplants performed during this 5-year review. The recipients’ kidney involved from sibling donation (22.4%, mean age 37.18), parents donation (32.7%, mean age 27.56), offspring donation (22.4%, mean age 54.27) and spouse donation (22.4%, mean age 49.09). The GFR of the recipients had significant difference between these four groups during the following periods. The mean last follow-up postoperative GFR of the recipients was 77.71ml/min for offspring donors, 57.81ml/min for parents donors, 65.91ml/min for sibling donors and 42.91ml/min for the spouse donors respectively (p = 0.04). The numbers of female donors were more than the male donors (32 vs 17). Two grafts loss were noted all in the spouse living donor population due to infection (CMV virus and urinary tract infection).