

## Podium-3 Oncology

### PD3-1:

#### MODEL FOR PREDICTING THE RISK OF ISCHEMIC STROKE AFTER RADICAL PROSTATECTOMY

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**Purpose:** The aim of this study is to assess the predictive value of CHADS2 scores, CHA2DS2-VASc scores and Charlson Comorbidity Index Score (CCIS) for stroke among patients with prostate cancer.

**Materials and Methods:** We used Taiwan registry data base, National Health Insurance Research Database (NHIRD) in this study. We identified participants with non-atrial fibrillation (AF) prostate cancer diagnoses who underwent radical prostatectomy between January 1, 1997 and December 31, 2011. CHADS2 scores, CHA2DS2-VASc scores and CCIS were used to stratify the ischemic stroke risk. The scores were calculated based on the comorbidities recorded before radical prostatectomy. The receiver operating characteristics curve (ROC) was used to assess the prediction accuracy for ischemic stroke. All participants were followed from the date of enrollment until ischemic stroke, death, or the end of the 5-year follow up period.

**Results:** There were 5414 patients diagnosed with prostate cancer undergoing radical prostatectomy in this study. The mean age at diagnosis was  $65 \pm 6$  years. The prediction accuracy for ischemic stroke in better in CHADS2 scores (AUC = 0.971) and CHA2DS2-VASc scores (AUC = 0.953) than CCIS (AUC = 0.504).

**Conclusions:** Our results show that the CHADS2 score could be applied for ischemic stroke prediction in prostate cancer patients underwent radical prostatectomy. Cardiovascular risks evaluation and management are suggested for these patient with higher CHADS2 score.

### PD3-2:

#### DOES IT NEED TO REMOVE PRE-PROSTATIC FAT TO DETECTED LYMPH NODE METASTASIS OF PROSTATE CANCER DURING ROBOTIC ASSISTED RADICAL PROSTATECTOMY?

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**Purpose:** To determine the number of lymph node of pre-prostatic fat and the incidence of metastatic lymph nodes in the lymph node dissection during robotic assisted radical prostatectomy (RARP)

**Materials and Methods:** During December 2012 to September 2015, pre-prostatic fat was removed in 182 patients who underwent RARP. These tissues were sent for pathological analysis to determine the number of lymph nodes and the count of metastatic lymph nodes. Another 128 patients without pre-prostatic fat removal were collected as control group. Operation features, such as time consumption of operation, estimated blood loss, day of hospitalization, and incidence of complication were compared within these two groups.

**Results:** Lymph nodes within pre-prostatic fat were detected in 17/188 (9%) patients. Metastatic lymph node was found in 2/188 (1%) among these patients. Patients with metastatic lymph nodes in pre-prostatic fat had no obturator lymph nodes involved. There were no significant differences of operation features between experimental and control group.

**Conclusions:** Our analysis demonstrates that pre-prostatic fat contains lymph nodes. The rate of present of lymph node metastases was high. There was no increasing of the risk of surgery for Pre prostatic fat removal. Therefore, It should be routinely removed and received pathological analysis at radical prostatectomy for precise lymph node staging

### PD3-3:

#### PREVENTION AND MANAGEMENT OF COMPLICATIONS DURING ROBOTIC ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY FROM COMPREHENSIVE PLANNING : EXPERIENCE OF A SINGLE SURGEON OF 1000 CASES

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**Purpose:** To report how to prevent and manage complications of robotic assisted laparoscopic radical prostatectomy (RALP) performed by a single surgeon in Taiwan from 1000 cases experience.

**Materials and Methods:** Complication (Clavien system) rates were prospectively assessed in 1000 consecutive patients undergoing RALP (Group I: cases 1-200, IIa: 201-400, IIb: 401-600, IIIa: 601-800 and IIIb: 801-1000). Preoperative evaluation focus on gouty history, drugs influence clotting time and cardiopulmonary problems. Magnetic resonance imaging were routinely done. Operative difficulty was assessed including neo-adjuvant hormonal therapy (NHT), obese patients (BMI > 30), prostate volume > 70 g, large median lobe with intravesical protrusion > 1 cm, previous transurethral resection of the prostate (TURP), previous pelvic surgery, received extended pelvic lymph nodes dissection (EPLND), salvage robotic radical prostatectomy (SRP). Clinical pathway was described below: Patients were allowed to have water and then resumed regular diet on POD 1-2. The drainage tube was removed and intravenous fluid discontinued on POD 1-3.

**Results:** The trend of more older age, higher ASA score, body mass index (BMI) and more advanced clinical stage from Group I to Group IIIb, it is significantly statistical differences. The trend of cases of NHT, obese patients (BMI > 30), previous pelvic surgery, received EPLND and SRP were significantly increased from Group I to Group IIIb. Conversely, a trendy significantly less blood loss occurred (Group I 179 ml, IIa 117 ml, IIb 90 ml, IIIa 99ml, IIIb: 97 ml,  $p < 0.001$ ). Blood transfusion (BT) incidence was gradually reduced from 3.5% to 0.5% in Groups I and IIIb, respectively ( $p = 0.022$ ). The total complication was 6.4% (64/1000) (surgical/medical : 5% / 1.4%). Statistically significant decrease tendency of complication rate was 12%, 6%, 6%, 4% and 4% in Groups I, IIa, IIb, IIIa and IIIb respectively ( $p = 0.003$ ). The most common complication (11/1000 = 1.1%) was blood transfusion and bowel problem.

**Conclusion:** Learning curve for every 200 cases of RALP showed significantly less complication even the operative difficulty was increased. The keys to prevent complication was preoperation evaluation meticulously, MRI planning 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.

### PD3-4:

#### COMPARISONS OF ONCOLOGICAL AND FUNCTIONAL OUTCOMES AMONG RADICAL RETROPUBIC PROSTATECTOMY, HIGH DOSE RATE BRACHYTHERAPY, CRYOABLATION AND HIGH-INTENSITY FOCUSED ULTRASOUND FOR LOCALIZED PROSTATE CANCER: A PROSPECTIVE, CONTROLLED, NONRANDOMIZED TRIAL

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**Purpose:** To conduct a prospective, controlled, nonrandomized, single institutional comparison for radical retropubic prostatectomy (RRP), high dose rate brachytherapy (HDRBT), cryoablation and high-intensity focused

ultrasound (HIFU) in localized prostate cancer with respect to oncological and functional outcomes.

**Materials and Methods:** We enrolled 97, 161, 114 and 120 patients of RRP, HDRBT, cryoablation and HIFU respectively for localized prostate cancer from May 2008 to December 2013. PSA biochemical recurrence, salvage treatment-free rate, metastasis-free rate, and PSA biochemical recurrence-free survival were collected for oncological outcomes. Functional outcomes included complications and serial IIEF-5 scores, IPSS and related QoL scores.

**Results:** During nearly three years of follow-up, the patients of HDRBT experienced higher PSA biochemical recurrence rate overall (54.7%), as well as D'Amico intermediate-risk (34.4%) and high-risk (61.8%) groups, lower salvage treatment-free rate (46.7%), and metastasis-free rate (90.7%). Besides, the patients of RRP demonstrated higher urethral stricture (29.9%) and urinary incontinence rate (11.3%). The patients of HIFU revealed lower de novo erectile dysfunction rate at one year (65.6%), higher serial IIEF-5 scores, lower IPSS and related QoL scores.

**Conclusion:** Among the four treatments, the patients of HDRBT demonstrated the worst oncological outcomes in D'Amico intermediate and high-risk groups. Besides, the patients of RRP had more complications rate in urethral stricture and urinary incontinence. Moreover, the patients of HIFU experienced better urinary function improvement and more possible sexual function preservation. In consideration of trifecta, HIFU may provide equivalent cancer control and better quality of life for patients of localized prostate cancer.

#### PD3-5:

#### LAPAROSCOPIC RETZIUS-SPARING RADICAL PROSTATECTOMY: A REVERSED EVOLUTION FROM ROBOTIC-ASSISTED RADICAL PROSTATECTOMY

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**Purpose:** Robot-assisted radical prostatectomy (RaRP) is viewed as the main surgical option in patients with localized prostate cancer. Robotic-assisted Retzius-sparing radical prostatectomy (Retzius-sparing RaRP) is also in development to achieve the trifecta (cancer free, continence and potency). For economic consideration, we modified the methodology using the same Retzius-sparing approach but with laparoscope.

**Materials and Methods:** A total of 5 patients underwent Retzius-sparing LRP from May to August of 2015. General characters of patients, peri-operative parameters, functional and oncologic data were collected. Patient position and trocar placement is identical with our conventional LRP. The steps of whole procedure were very similar to the method that SK Lim, et al. (BJU Int 2014; 114: 236–244) had published to describe the process of Retzius-sparing RaRP. Continence was defined as no need for pad in daily life.

**Results:** The average operative time was 213 minutes and the average amount of blood loss was 195 ml. Two patients received bilateral NVB

preserving while the other three patients received unilateral partial preserving. Four patients got immediate continence control at the first day after Foley removal. The other one had post-operative anastomotic leakage and initial mild stress urine incontinence but got recovery in 2 weeks.

**Conclusions:** At the very first time we show the Retzius-sparing LRP is a feasible option for localized prostate cancer. It might result in early continence control in our initial experience and with less economic cost than RaRP for patients. Further long-term prospective studies are needed to define the benefits of this method.

#### PD3-6:

#### THE ASSOCIATION OF INTERLEUKIN-10 PROMOTER GENOTYPES TO TAIWANESE RENAL CELL CARCINOMA SUSCEPTIBILITY

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**Purpose:** Renal cell carcinoma (RCC) accounts for about 3% of all cancer-related mortalities worldwide and the risk factors for the development of RCC have not yet been fully elucidated. Mounting proteomic evidence suggests that inflammatory process plays a role in RCC etiology, and interleukin-10 (IL-10) is an important immunosuppressive cytokine. However, little is known about the contribution of IL-10 genotypes to RCC. The study aimed at evaluating the contribution of IL-10 promoter A-1082G (rs1800896), T-819C (rs3021097), A-592C (rs1800872) genetic polymorphisms to the risk of RCC in Taiwan.

**Materials and Methods:** Associations of the three IL-10 polymorphic genotypes with the risk of RCC were examined among 92 RCC patients and 580 age- and gender-matched cancer-free controls by polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) methodology.

**Results:** The pilot results showed that the percentages of TT and TC for IL-10 T-819C genotypes were significantly higher in the RCC patient group than those in the healthy control group. The CC genotype carriers were of lower risk for RCC (odds ratio = 0.45, 95% confidence interval = 0.23–0.72, p = 0.0033). There is no difference in the distribution of A-1082G or A-592C genotype between the RCC and control groups.

**Conclusions:** In summary, the CC genotype of IL-10 T-819C genotype may have a protective effect on RCC risk in Taiwan. Further investigation with larger sample size in addition to genotype-phenotype correlation and intracellular mechanisms are our future work.