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## Non-Discussion Poster

# Oncology

# NDP001:

EXTENDED LYMPHADENECTOMY IMPROVES THE PROGNOSIS OF THE PATIENTS WITH MUSCLE INVASIVE BLADDER CANCER: ANALYSIS FROM THE NATIONWIDE CANCER REGISTRY DATABASE

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Purpose: This study was designed to assess the impact of the number of dissected lymph nodes (LNs) on overall survival (OS) and cancer specific survival (CSS) in patients undergoing radical cystectomy (RC) for bladder

Materials and Methods: From 2008 to 2013, 289 patients undergoing RC for treating muscle invasive bladder urothelial carcinoma staging T2-4N0 were selected from Taiwan cancer registry database. The number of removed LNs, age, gender, pathological grade and stage, and pre-operative image findings were assessed. The Cox proportional hazard model was used to evaluate the impact of the number of removed LNs on overall survival (OS) and cancer specific survival (CSS).

Results: After stratifying patients by the number of removed LNs, we discovered there were no significant differences of tumor stages, grade, age, and gender. In multivariate regression models, after the adjustment of age, gender, pathological grade and pathological stage, there was a statistically significant improvement OS (HR: 0.40; 95% CI: 0.20-0.82) and CSS (HR: 0.58; 95% CI: 0.36-0.92) in the patients who had dissected LNs of more than 10 compared to those with fewer dissected LNs.

Conclusion: In patients undergoing RC, dissected LNs of more than 10 was associated with a significantly better OS and CSS. That indicated an extended lymphadenectomy would be helpful for improving patients' prognosis.

### NDP002:

PATIENTS WITH PATHOLOGICAL T3 PROSTATE CANCER TREATED WITH ROBOT-ASSISTED RADICAL PROSTATECTOMY - A SINGLE INSTITUE **EXPERIENCE** 

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Purpose: We analyzed the surgical results of prostate cancer in patients who had pT3 disease were treated by robot-assisted radical prostatectomy (RARP) at our hospital.

Materials and Methods: There were over 500 prostate cancers had been treated by RARP at our institution. We review 363 consecutive patients who underwent RARP by a single surgeon from September 2009 to February 2015. Peri- and post-operative data were collected and analyzed for all patients.

**Results**: In total, 363 consecutive patients underwent RARP. Seven patients with distant metastases at diagnosis, had neoadjuvant therapy and pathological TO disease were excluded. Of these 356 patients, the mean age was 65.2 years, the mean pre-operative PSA was 10.2 ng/mL, 123 (34.6%) patients with mean age 65.9 and mean pre-operative PSA 13.9 ng/mL were found to have pT3 disease, including pT3a in 80 and pT3b in 43 cases. The PSM rate for patients with pT3 disease was 56.2%. The PSM rate for patients with pT3a and pT3b disease was 51.3% and 39.5%, respectively. Comparing pT3 with pT2 cases, the patient's age, prostate weight were no different. The pT3 group had higher mean pre-operative PSA level (13.4 vs 22.3 ng/ mL), percentage of tumor volume (14.4% vs 22.3%), positive margin rates (9.9% vs 54.5%), biopsy and prostatectomy specimen Gleason score (6.7 vs 7.3, and 7.0 vs 7.4). 37 (30.1%) in 109 pT3 patients with biochemical recurrence (BCR), time to BCR was 24 months, Biopsy Gleason score is the only independent preoperative predictor of BCR in pT3a cases. Biopsy Gleason and preoperative PSA are the only independent preoperative predictors of BCR in pT3b RARP cases.

Conclusion: We present the results of the treatment for locally advanced prostate cancer initially managed with RARP. Our findings suggest that patients with locally advanced prostate cancer can be treated with RARP with higher but acceptable positive margin rates and surgical results.

#### NDP003:

## TREND OF GLOBAL QUALITY OF LIFE IN LOCALIZED OR METASTATIC PROSTATE CANCER PATIENTS AFTER TREATMENT

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Purpose: Quality of life (QoL) is an important concern in prostate cancer (PC) treatment, particularly facing with selection of any optimal therapy. The trend of global QoL may help physician and patients in decision making for treatment strategy. The aim of the study is to explore the trend of global QoL after standard treatments in PC patients with localized or metastatic diseases.

Materials and Methods: From January 2013 to April 2015, self-reported questionnaires, World Health Organization Quality of Life-BREF (WHO-QOL-BREF) serving as a tool for global QoL assessment with good validity and reliability, were randomly obtained from prostate cancer patients at urologic outpatient clinic. Repeated measurements in same individuals were obtained from some individuals at different times during follow-up. The mix-effect model was used for analyzing the determinant of global QoL and a Kernel smoothing curve fitting was used for analyzing the trend of global QoL in the initial 5-year follow-up.

Results: A total of 287 patients and 526 person-times completed the WHOQOL-BREF questionnaire with a mean age of 72.7 years, including localized disease (n = 156) and metastatic disease (n = 131). The analysis of the Kernel smooth curve showed decreases of global QoL in physical, psychological and social domains in localized disease patients after receiving radical prostatectomy or radiotherapy compare to active surveillance group, both of which gradually recovered in one and half a year. In contrast, metastatic patients exhibited both increases of global QoL in physical and psychological domains after androgen deprivation therapy or palliative radiotherapy as compared with watchful and supportive groups (Figure 1). Moreover, radiotherapy is an independent risk factor

for sexual life impairment (p values, 3 months after radiotherapy and > 3 months after radiotherapy, 0.017 and 0.004, respectively). There were some limitations in this study, including single-institute and outpatient alone

**Conclusion**: During the initial 5-year follow-up, both radical prostatectomy and radiotherapy had one-to-two year negative impacts on global QoL in localized patients. Both hormonal therapy and palliative radiotherapy had one-to-two year positive impacts on global QoL in metastatic patients. Radiotherapy had a profound long-term decrease in sexual life performance. These results can help physicians and patients in decision making for optimal therapy.

#### NDP004:

# ANALYSIS OF DETRUSOR MUSCLE SAMPLING DURING TRANSURETHRAL RESECTION OF BLADDER TUMOR IN NON-MUSCLE INVASIVE BLADDER CANCER

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**Purpose**: Transurethral resection of bladder tumor (TUR-BT) plays an important role in the treatment and diagnosis of non-muscle invasive bladder cancer (NMIBC). However, the pathology report of the bladder tumor often had no detrusor muscle presentation. In this situation, it is difficult to decided the advanced treatment. Therefore, we analysis that the detrusor muscle presentation influence the prognosis and the factors affect the detrusor muscle presentation.

**Materials and Methods**: Retrospective review the pathology report of TUR-BT from 2013 Jan. to 2013 Dec. in Chang Gung Memorial hospital in Linkou. All patients was follow up for at least one-year.

**Results**: There are 150 patients underwent TUR-BT at Linkou CGMH in this year. The NMIBC cases was about 100 (66.7%). The pathology report showed detrusor muscle was 37% and no mention of detrusor muscle was 5%. Compared between the detrusor muscle present and the detrusor muscle absent, the mortality rate within 1 year (0% v.s. 3%, p = 0.157) and early recurrent rate (14% v.s. 12%, p > 0.05) had no significant difference. Besides, larger bladder tumor (>3cm, p = 0.037) and high-grade bladder tumor (p = 0.018) had higher detrusor muscle presentation rate. There was no difference in age (p = 0.298), gender (p = 0.454) and primary stage (p = 0.383) in detrusor muscle presentation rate.

**Conclusion:** In this data, there was no obvious difference of prognosis within 1 year, but need longer time of follow up to prove that. Pathologists rightly mention detrusor muscle when there is a higher probability of invasion. This help the clinic physician for further treatment decision.

#### NDP005:

SEMI-RIGID URETEROSCOPY WITH THULLIUM LASER FOR THE TREATMENT OF URETER UROTHELIAL CARCINOMA: EXPERIENCE OF MACKAY MEMORIAL HOSPITAL

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**Purpose**: Radical nephroureterectomy is the standard treatment of high risk upper tract urothelial carcinoma (UTUC). However, renal-sparing treatment as endoscopic ablation or segmental resection can be used for low risk ureter urothelial carcinoma without compromising oncological outcomes. In present study, we share the experience of using semi-rigid uretersoscope with Thullium laser to treat ureter urothelial carcinoma

**Materials and Methods**: We retrospectively reviewed 9 cases with ureter urothelial carcinoma managed by Thullium laser with semi-rigid uretersoscope from January 2014 to June 2015 in our hospital. Peri-operative outcome and post-operative outcome were recorded.

**Results**: There are 9 patients underwent endoscopic treatment. Mean (range) age was 67.1 (56~85) years old. Mean (range) follow up was 13.9 (3~22) months. Overall survival rate was 100%. Five patients received endoscopic management due to low-risk tumor. Upper tract progression or persisted carcinoma in situ was noted in three patients (60%), all of

them received nephroureterectomy after then. Four patients received endoscopic treatment because they are not suitable to nephroureterectomy. All of the four patients with high risk or not suitable to nephroureterectomy had recurrence. No major complication was noted perioperatively.

**Conclusion**: After endoscopic surgery, upper tract recurrence is common even in low risk tumor. Regular surveillance with URS is needed. Salvage nephroureterectomy is advised during close follow up.

#### NDP006:

COMPLEMENTARY TRADITIONAL CHINESE MEDICINE THERAPY IMPROVES SURVIVAL IN PATIENTS WITH METASTATIC PROSTATE CANCER

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**Purpose**: More than 50% of prostate cancer patients have used traditional Chinese medicine (TCM) in Taiwan. However, the long-term clinical efficacy of TCM in prostate cancer patients remains unclear. Here, we investigated the relationship between TCM use and the survival of prostate cancer patients.

**Materials and Methods**: A retrospective nationwide cohort study of prostate cancer patients was conducted between 1998 and 2003 using the Taiwan National Health Insurance Research Database. The association between death risk and TCM use was determined using Cox proportional hazards models and Kaplan-Meier curves.

**Results**: Of the 1132 selected prostate cancer patients, 730 (64.5%) and 402 (35.5%) were TCM users and non-usrs, respectively. The mean follow-up period was 8.38 years, and 292 (25.8%) deaths were reported. TCM users had a decreased mortality rate (21.9%) compared to non-users (32.8%). A lower death risk was observed with longer TCM use, especially in patients who used TCM for  $\geq$  200 days (aHR, 0.61; 95% CI, 0.44–0.84). TCM users with metastatic prostate cancer had a significant lower hazard ratio than non-users (aHR, 0.70; 95% CI, 0.51–0.95).

**Conclusion**: The result suggested that TCM might be associated with a reduced risk of death in metastatic prostate cancer patients

#### NDP007:

# UPPER URINARY TRACT TRANSITIONAL CANCER-THE EXPERIENCES IN RECENT 5 YEARS AND LITERATURE REVIEW

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**Purpose**: It has been shown that there are some difference of the distribution of the upper urinary tract cancer between Taiwanese and other races. Previous studies have shown an increased risk of upper urinary tract urothelial carcinoma. We try to re-examine this risk.

**Materials and Methods**: We enrolled all 93 patients of upper urinary tract cancer in Show-Chaun hospital in Chang-Hua Taiwan during 2008–2015, and we retrospectively followed the development of cancer until 2012 by analysis of data collected from the Taiwan Cancer Registry.

**Results**: There were 93 newly diagnosed cases of upper urological cancer and most of them were transitional cell carcinoma (70.1%) and renal cell carcinoma (28.0%). The mean age at diagnosis for upper urinary tract cancer was 65.5 years. Focusing on urothelial carcinoma, when stratified by location, there are 45.2% in renal pelvis, 32.6% in upper ureter and 20.4% in both. About the tumor stage, there are 28.3% patients was stage I, 19.8% was stage II, 35.0% was stage III and 16.9% was stage IV. The crude death rate during 2008 to 2015 was 9.31% in stage I, 7.23% in stage II, 30.4% in stage III and 66.7% in stage IV, respectively.

**Conclusion**: The urothelial carcinoma consisted the majority of upper urinary tract cancer in Taiwan, followed by renal cell carcinoma. Most of the urothelial carcinoma was located in the renal pelvis. It makes the diagnosis more challengeable.