NDP008:

THE CLINICAL PRESENTATION OF RENAL CELL CARCINOMA WITH SIMULTANEOUS DIFFERENT HISTOLOGIC TYPE, A 15-YEAR DATABASE ANALYSIS IN TAIPEI VETERANS GENERAL HOSPITAL

Yun-Chu Chang¹, Tzu-Chun Wei^{1,2}, Alex T.L. Lin^{1,2}, Kuang-Kuo Chen^{1,2}. ¹Department of Urology, Taipei Veterans General Hospital, National Yang Ming University, Taipei, Taiwan; ²Department of Urology, School of Medicine, and Shu-Tien Urological Institute, National Yang Ming University, Taipei, Taiwan

Purpose: Most of the current studies were aimed at single histologic type renal cell carcinoma (RCC). The simultaneous different histologic RCC were barely discussed. This study was aimed to these patient with special clinical features and outcome.

Materials and Methods: We retrospectively reviwed patient in the past 15 years who received operation for renal tumor in Taipei Veterans General Hospital, and the pathology report revealed RCC with simultaneous tow different cell type on the same kidney. The demographic data including age at surgery, sex, body weight index (BMI), comorbidities, and the pre-operative CT image findings were collected, as well as the operative method, pathologic outcome, and further outcome while follow-up.

Results: Total 15 patients were included. The mean age at surgery was 59.3 ± 13.2 years and mean BMI was 25.3 ± 4.8 kg/m². Fourteen patients were male (86.7%) and 8 (53.3%) had their tumor on the left side. Among the comorbidities, hypertension accounts for the highest incidence (46.6%), followed by chronic kidney disease (end-stage renal disease or polycystic kidney disease, 40%), coronary artery disease (26.7%), type 2 diabetes mellitus (20%) and malignant disease of other organ (20%). There were only 2 patients (13.3%) having distinct 2 tumors from initial CT image, and the pathology reported different cell type. Other patient (26.7%) had incidental the other small tumor in the specimen or there were mixed histologic feature in single tumor. The average diameter of the main tumor was 5.1 ± 2.9 cm and the smaller one 1.4 ± 1.0 cm. There were 4 patients (26.7%) having lymph node and distant metastasis at the meanwhile of diagnosis. According to the AJCC cancer staging (2010), T1a tumor represented for 20%, T1b tumor 20%, T2a tumor 26.7%, and T3a tumor 6.7%. The other smaller tumor were all of T1a stage. Most of tumor were classified as Fuhrman grade 2 (66.7%), followed by grade 4 (20%) and grade 3 (13.3%). The operative method were mainly open radical nephrectomy (40%), followed by laparoscopic radical nephrectomy (26.7%), open partial nephrectomy (13.3%), robotic-assisted partial nephrectomy (13.3%) and robotic-assisted radical nephrectomy (6.7%).

The two differnt pathologic cell type of each patient were clear cell with papillary RCC (20%), clear cell with chromophobe RCC (20%), clear cell with mucinous tubular and spindle carcinoma (13.3%), and clear cell with clear cell papillary RCC (13.3%), clear cell and collecting duct carcinoma (6.7%), papillary and mucinous tubular and spindle carcinoma (6.7%), papillary and acquired cystic renal disease related carcinoma (6.7%), and clear cell, papillary and mucinous tubular and spindle carcinoma (6.7%), and clear cell, papillary and mucinous tubular and spindle carcinoma (6.7%).

The average follow-up interval was 29.1 ± 21.1 months. The recurrence were found in 2 patients, one with clear cell and mucinous tubular and spindle carcinoma at the 55th month post-OP and the other with papillary cell and acquired cystic renal disease related carcinoma at the 30th month, respectively. Three patients with initial distant metastasis expired about 6 months after the surgery, in average.

Conclusion: Simultaneous two histological cell types RCC on the same kidney was relately rare. Our 15-year data showed various combinations of two histolytic cell type. However, it is difficult to correlate the prognosis and clinical outcome with the combination of cell types due to the limited data of recurrence and 5-year cancer specific mortality rate.

NDP009:

THE SAFETY AND EFFICACY OF LOW DOSE BCG INTRAVESICAL INSTILLATION FOR THE TREATMENT OF UREMIC OR KIDNEY TRANSPLANT PATIENTS WITH RECURRENT UROTHELIAL CARCINOMA OF THE BLADDER

<u>Wei-Ting Kuo</u>, Chia-Cheng Yu, Tony T. Wu. Division of Urology, Department of Surgery, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, ROC **Purpose**: Theoretically, immunosuppression is a relative contraindication for intravesical BCG therapy because of the risk of severe morbidity and sepsis. We present our experience with intravesical BCG therapy in uremia/renal transplant patients with recurrent urothelial carcinoma of Bladder.

Materials and Methods: A total of 34 patients with recurrent superficial bladder cancer (pTa or pT1) were enrolled. Ten patients are uremic and the other 14 were renal transplantation patient. Intravesical instillation with low dose (1/2 or 1/3 of 81mg) of BCG was administered weekly for 6 weeks, postoperatively. Boost dose was given at 3 months interval and then every 6 months until 2 years postoperatively. Cystoscopic examination was performed every 3 months for the first year and semiannually for 2 years and then annually.

Results: Low dose BCG intravesical instillation was completed in 30 patients. Tumor recurrence was recognized in 2 patients during followup, who restarted second BCG induction therapy without recurrence. BCG therapy was withdrawn in 4 patients due to BCG-related local toxicity. No major complication or systemic dissemination of TB bacili was noted. Transient dysuria and hematuria are the most common adverse events.

Conclusion: Uremia/renal transplantation patients were traditionally considered as immuno-compromised and high risk for tumor recurrence. Low dose BCG intravesical instillation in such patients seems to be a safe prophylaxis with similar efficacy on tumor control.

NDP010:

THE SERUM MICRORNA IN PROSTATE CANCER PATIENTS AS A BIOMARKER FOR EARLY DETECTION

<u>Jui-Ming Liu</u>¹, Ren-Jun Hsu². ¹Division of Urology, Department of Surgery, Taoyuan General Hospital, Ministry of Health and Welfare, Taoyuan, Taiwan; ²Department of Pathology and Graduate Institute of Pathology and Parasitology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Purpose: Prostate cancer is the 6th most cancer death in Taiwan. There are no significant symptoms and signs in early prostate cancer. MicroRNA is stable in the cell or tissue and not easily to be degraded. To identify whether microRNA a potential biomarker for early detection of prostate cancer, we conducted this study.

Materials and Methods: We collected serum from two different prostate cancer patients. Serum from other four non-prostate cancer patients was collected as control group. The QRT-PCR array (782 micro RNAs) was used to select high specific expressed microRNAs from serum of prostate cancer patient. We used above specific microRNAs to detect serum from 20 prostate cancer patients and 40 non-prostate cancer subjects.

Results: There were 13 microRNAs highly expressed in serum of prostate cancer patients than control group. After amplification, there were only 2 microRNAs highly correlation with prostate cancer. We overexpressed these 2 microRNAs in LNCaP, increased carcinogenesis in LNCaP was noted. **Conclusion**: The microRNA is a potential biomarker in early detection of prostate cancer.

NDP011:

THE MOLECULAR MECHANISM OF THE INHIBITORY EFFECT ON PROSTATE CANCER CELL GROWTH THROUGH THE DIRECT ACTION OF ESTROGEN ON ESTROGEN RECEPTOR

<u>Jui-Ming Liu</u>¹, Ren-Jun Hsu². ¹Division of Urology, Department of Surgery, Taoyuan General Hospital, Ministry of Health and Welfare, Taoyuan, Taiwan; ²Department of Pathology and Graduate Institute of Pathology and Parasitology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Purpose: Hormone replacement therapy is one of treatment choice of prostate cancer. Estrogen has inhibition of prostate cancer by affect pituitary gland. This negative feedback is lowering level of testosterone not directly act on prostate cancer cell. To determine whether estrogen has direct effect on prostate cancer cell, we conducted this study.

Materials and Methods: Choice of two prostate cancer research as the main material, the first detection of estrogen receptors, to see the estrogen receptor (ER) expression in the case of prostate cells to clarify the

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