of CKD progression were overlooked by relying solely on GFR and 16% of moderate-risk patients were re-classified as very high risk. We would advocate for routine determination of proteinuria prior to intervention for renal masses to better classify CKD in these at-risk patients.

Source of Funding: Betz Family Endowment for Cancer Research

MP44-03

IS THE ASSOCIATION BETWEEN KIDNEY CANCER AND HEMODIALYSIS DIFFERENT FROM PERITONEAL DIALYSIS? - A NATIONWIDE POPULATION-BASED STUDY

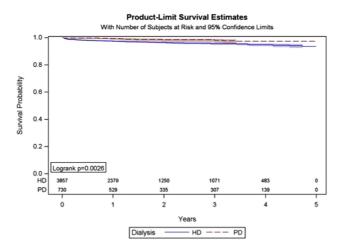
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INTRODUCTION AND OBJECTIVES: End stage renal disease (ESRD) has been considered related to renal cancer. However, whether the association of renal cancer with hemodialysis (HD) is different from peritoneal dialysis (PD) is an unanswered question. We investigated this issue by analyzing a nationwide health insurance database.

METHODS: A urology dataset including 3,431,366 individuals was selected from the National Health Insurance Research Database (NHIRD) of Taiwan for the year 2006 to 2010. The claim data was used for the study. We identified 3,857 patients with ESRD who accepted HD (HD group) between January 2006 and December 2007. Another 730 patients who have ever experienced PD (PD group) were also identified. The follow-up was until December, 2010. The incidence of renal cancer was compared between the 2 groups. Independent T-test, Kaplan-Meier survival plot, Log-rank test, and Cox Proportional Hazard Regression model were used for statistics.

RESULTS: The male to female ratio was 62.7% to 32.3% for HD group and 58.0% to 42.0% for PD group. The mean age was 65.2; $\acute{O}13.5$ years for HD group and 51.6; $\acute{O}16.9$ years for PD group (p<0.0001). The incidence of kidney cancer was 3.27% for HD group (n=126) and 1.51% for PD group (n=11). The mean cancer-free survival of both groups showed significant difference (HD group vs. PD group: 4.55 vs. 3.39 years, p=0.0026, Figure).

CONCLUSIONS: The incidence of renal cancer for patients with ESRD who accepted HD was higher than those who ever accepted PD. The mean cancer-free survival was longer for patients with ESRD who accepted HD than those who ever accepted PD. The limitation of the study is the rather short period of follow-up.



Source of Funding: none

MP44-04

NEPHRON-SPARING SURGERY PROTECTS FROM CHRONIC KIDNEY DISEASE RELATIVE TO RADICAL NEPHRECTOMY BUT DOES NOT IMPACT ON OTHER-CAUSES MORTALITY: LONG-TERM (MORE THAN 10 YEARS) SURVIVAL AND FUNCTIONAL OUTCOMES IN PATIENTS WITH A T1A-T1B RENAL MASS

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INTRODUCTION AND OBJECTIVES: Several reports demonstrated that nephron sparing surgery (NSS) better protects renal function relative to radical nephrectomy (RN). However, controversies exist whether NSS may also affect other-cause mortality (OCM). In the current study, we aimed to report the long term (more than 10 years) survival and functional outcomes of NSS vs. RN after accounting for clinical characteristics, comorbidities and individual patients' cardiovascular risk.

METHODS: A collaboration among five centers allowed collecting 1189 patients with a clinical T1a-T1bN0M0 renal mass (1988-2004). Patients underwent RN (n=678, 57%) or NSS (n=511, 43%) and showed normal estimated glomerular filtration rates (eGFR) before surgery (defined as eGFR≥60). Descriptive and Cox regression analyses were used to predict the risk of OCM and chronic kidney disease (CKD, defined as post-operative GFR<60). To adjust for inherent baseline differences among patients, we included as covariates: age, pre-operative GFR, clinical tumor size, hypertension (none vs. yes vs. controlled by medical therapy), diabetes, baseline Charlson comorbidity index (CCI), body mass index and smoker status.

RESULTS: Median follow up period was 10 years. Median age was 61 yrs (IQR 51-68). Sixty-six (5.6%) patients had diabetes. Overall, 141 (11.9%) and 154 (13.0%) patients had hypertension or hypertension controlled by medical therapy, respectively. CCI resulted 2 or higher in 21% of the cases.

The 5 yr, 10 yr and 15 yr CKD rates after surgery were 6.3%, 16.4% and 42.3% for NSS vs. 13.2%, 28.4% and 48.9% for RN, respectively (p=0.002, HR 0.65 95%Cl 0.49-0.85). At multivariable analyses, patients who underwent NSS showed significantly lower risk to harbour CKD compared with their RN-treated counterparts (p=0.01, HR 0.65; 95%Cl, 0.47-0.92).

The 5 yr, 10 yr and 15 yr OCM rates after surgery were 6.0%, 14.0% and 26.6% for NSS vs. 7.3%, 14.2% and 22.5% for RN, respectively (p=0.6, HR 1.08 95%CI 0.80-1.46). At multivariable analyses, after accounting for clinical characteristics, comorbidities and individual cardiovascular risk, patients who underwent NSS showed similar risk to die for OCM compared with their RN-treated counterparts (p=0.8, HR 0.97 95%CI 0.67-1.40).

CONCLUSIONS: When considering long-term survival and functional outcomes in patients with a clinical T1a-T1b mass and normal renal function before surgery, NSS protects from CKD but does not impact on OCM relative to RN.

Source of Funding: None

MP44-05

EXPLORATION OF PREDICTIVE FACTORS OF POST-PARTIAL NEPHRECTOMY RENAL FUNCTION: HOST FACTORS, RATHER THAN SURGICAL FACTORS, MAY BE USEFUL PREDICTORS IN THE POST-OPERATIVE STABLE PERIOD.

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INTRODUCTION AND OBJECTIVES: To identify factors that are predictive of post-partial nephrectomy (PN) renal function, we