



Analysis of Mortality and Survival Rate of Kidney Cancer: The Effect of Age and gender.

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INTRODUCTION

Renal cell carcinoma (RCC) is a complex disease that must be analyzed from several points of view, and special aspects need to be emphasized for the elderly. It affects both males and females, but males are twice as likely to develop kidney cancer than females. This study aims to provide the relationship of gender and age factors to treatment outcomes in patients with RCC.

RESULTS

A total of 818 RCC patients were identified. Male is more frequently diagnosed with kidney cancer than female (70.6%). Mean and Median age were 57.9 years (SD 13.6) and 59.3 years (IQR 18.9), respectively. Over the past 10 years, the median follow-up period were 2.85 years (IQR: 4.5) and 3.2 years (4.4). There were 305 deaths, 34.1 % and 43.9 % in the <60 and >60 years, respectively. The 5-year OS was 60.7% for both male and female, 58.4% in male and 66.4% in female, respectively (P= 0.025). A separate analysis between the age group, age <60, 5-year OS were 60.5% in male and 74.5% in female, respectively (HR=0.61, P= 0.016). In elderly kidney patients, the 5-year OS between sex was not statistic significant. 5-year OS were 54.0% in male and 57.3% in female, respectively (HR=0.89, P=0.537).

Variables	Male	Female	Total
AGE			
<60	279	110	389
60+	299	130	429
TOPOGRAPHY			
Renal cell carcinoma	481	202	683
Clear cell carcinoma	73	30	103
Transition cell carcinoma	1	0	1
Other	23	8	31
AJCC STAGING			
STAGE I	55	22	77
STAGE II	9	11	20
STAGE III	32	9	41
STAGE IV	141	52	193
Unknown	341	146	487
Status			
Alive	348	165	513
Death	230	75	305

CONCLUSIONS

Gender was a significant prognostic factor for shorter survival in RCC. Older patients have more underlying causes including comorbidities and other factors than younger in both genders. Treatment of kidney cancer required multidisciplinary approaches especially in elderly

ACKNOWLEDGEMENT

I would like to express my sincere thanks and appreciation to Assoc. Prof. Ekaphop Sirachainan for kindness and suggestions for completing this study All members of the Ramathibodi Comprehensive Cancer Center.

METHODS

RCC patients diagnosed and treated from Jan 2012 to December 2021 and completed the follow-up by December 2022 were divided by 2 group (<60 years and ≥60 years). Kaplan–Meier method, log-rank test and A Cox proportional hazards model was used to determine the adjusted association between gender and overall survival (OS).

