Clinical characteristic and clinical outcomes of renal cell carcinoma in Ramathibodi hospital

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\textbf{Objective}: To evaluate demographic, clinical, and pathologic characteristics of RCC diagnosed and treated at Ramathibodi hospital.

\textbf{Method}: We retrospectively reviewed 281 medical records of RCC patients at the Ramathibodi hospital between January 2009 and December 2017 include baseline characteristic, type of treatments and treatment outcomes. All analyses were performed with Stata software, version 14.2

\textbf{Results}: A total of 281 RCC patients were identified. The median age was 59.1 years, and most of the patients were male (74.7%). Half of the patients presented with stage I (43.3%) followed by stage IV (27.3%) at the diagnosis. The common histological subtype was clear cell carcinoma (77.9%), and non-clear cell was 17.1%. Recurrent of the disease occurred in 25% of patients. There were 127 metastasis RCC patients. Among mRCC patients, clear cell subtype was 70.1%. All patients were categorized by IMDC prognostic model and MSKCC risk score. Most of them were an intermediate risk group (51.2%/58.3%), followed by poor risk group (29.1%/22.8%) and good risk group (14.2%/12.6%). Patients were treated with sunitinib (39.4%), pazopanib (26%), mTOR inhibitor (1.6%), sorafenib (1.6%), best supportive care (26.8%) and others (4.7%). About 41.7% of mRCC were received second-line treatment and 16.5% received later-line. There were 19 patients received cytoreductive nephrectomy. Median OS was 24 months in the treatment group and only 4.1 in the best supportive care group (p <0.05). The median OS was 35.3 months in sunitinib (N=50) and 17.3 months in pazopanib (N=33) (p=0.0328), but there were the imbalanced in assessment of the second line (62% vs. 57%) and later line of treatment (28% vs. 18%) in sunitinib compared with pazopanib group. And no difference in compliance and adverse effect between sunitinib and pazopanib.

\textbf{Conclusions}: From this study, we could confirm the benefit of targeted therapy in mRCC. There is the difference in overall survival in first-line treatment in our study but non-difference in PFS outcome. And in this study the adverse effect was tolerable.