Editorial Comment from Dr Izumi to Clinicopathological features and outcomes in patients with late recurrence of renal cell carcinoma after radical surgery

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Renal cell carcinoma (RCC) has some unique characteristics that are not observed in other cancers, such as a relatively high frequency of late recurrence (LR) after radical surgery.[1] In a study by Kobayashi et al.,[2] the Kaplan–Meier curves of overall survival (OS), disease-specific survival (DSS), and recurrence-free survival went linearly down for 15 years after radical surgery and did not plateau. Although some clinicopathological features of LR in RCC have been revealed in recent studies, their cause remains unclear.

LR is usually defined as recurrence more than 5 years after radical surgery. To characterize the clinical outcomes of all patients treated with radical surgery, it is reasonable to compare patients with LR to not only patients with early recurrence (ER; within 5 years after radical surgery) but also those without recurrence. A large study by Kroger et al.[3] including 1,210 patients reported that compared with patients with ER, patients with LR were younger and showed fewer sarcomatoid features, more clear cell histology, and lower Fuhrman grade. The latest study on Japanese patients by Fujii et al.[4] revealed the following parameters to be independent predictive factors of ER: positive symptoms at diagnosis, ≥pT2, positive lymphovascular invasion, and histological grade 3; these results were similar to those of Kobayashi et al.[2] However, both Kroger et al.[3] and Fujii et al.[4] did not include patients without recurrence after 5 years of radical surgery. It might be difficult to compare patients with LR to those without recurrence because the latter have the potential to relapse any time. Kobayashi et al.[2] reported that vascular invasion alone was the predictor of LR in multivariate analysis of patients who remained free of recurrence at 5 years after radical surgery. This result might be clinically significant with regard to follow-up schedule of such patients. Kaplan–Meier curves of OS and DSS in patients with LR further went linearly

down by at least 5 years after recurrence. Moreover, non-recurrence may contribute to the extension of survival. To appropriately treat recurrence, it should be detected as early as possible, and clinicians can shorten the follow-up interval of patients with vascular invasion.

Regardless of the study backgrounds, a common result of comparison between ER and LR was that patients with LR had a much better survival after recurrence. Bozkurt et al.[5] reported that patients with LR had a better response to sunitinib than did those with ER. Although slow growth may be a characteristic of LR, it is still unclear whether there are differences in responses to treatments such as molecular targeted therapies, cytokine therapies, and metastasectomy between ER and LR. Further larger studies are warranted to clarify the difference of response to treatments between ER and LR and the best follow-up schedule to appropriately identify recurrence in patients with RCC during a long follow-up time.

Conflict of interest

None declared

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