RESEARCH HIGHLIGHTS

KIDNEY CANCER

Are we overclassifying renal cancer?

In 2010, the American Joint Committee on Cancer (AJCC) and the Union Internationale Contre le Cancer (UICC) updated the TNM staging system for renal cell carcinoma (RCC). The revised guidelines divided T2 tumors into T2a and T2b, based on tumor diameter of >7 cm but <10 cm and >10 cm. respectively. The updated guidelines also redesignated tumors with venous extension: tumors which involved the renal vein or inferior vena cava [IVC] below the diaphragm (Level I caval involvement) were previously classified as pT3b. In the new system, tumors with extension or thrombus in the renal vein are designated pT3a, whereas those with evidence of Level I IVC involvement or thrombus are reclassified as pT3b.

Two studies aimed to determine whether these changes to the TNM system result in greater prognostic accuracy for patients with these tumor characteristics. Results have just been published in European Urology.

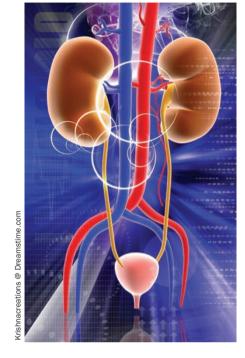
Venous extension was investigated by the newly created International Renal Cell Carcinoma-Venous Thrombus Consortium, a conglomerate of 11 institutions in Europe and the USA. Members reviewed data collected from more than 1,200 patients who had undergone radical nephrectomy with thrombectomy at their institution.

The team—led by Juan Martínez-Salamanca in Madrid, Spain—found a

marked difference in the 5-year cancerspecific survival of patients with renal vein (2010 pT3a) thrombus, compared to those with IVC thrombus (2010 pT3b). The improved prognosis of patients with pT3a versus pT3b disease persisted, remaining significant even 10 years after surgery. "This [classification] change means that patients with only renal vein involvement have a better prognosis than those with IVC involvement", comments Martínez-Salamanca. "Based on our data. this is true; so we support the last change of the TNM [system]".

By contrast, a team based in Germany does not support one of the updates to the AJCC/UICC staging system. Markus Kuczyk and colleagues focused their investigation on the effect of the changes in RCC classification according to tumor size. Retrospective analysis of data from more than 5,000 patients who had undergone surgery for T2 RCC failed to detect a significant difference in the 5-year survival rate between those with 2010 pT2a disease and those with 2010 pT2b disease, at 79% and 74%, respectively.

This finding indicates that the subdivision of the T2 stage does not improve the prognostic capacity of the TNM system. This negative result persisted even when the presence of metastasis was taken into consideration. However, when tumor size was considered as a continuous variable, without



classification into subgroups, tumor diameter emerged as an independent prognostic parameter.

More large studies are needed before the 2010 revision of the AJCC/UICC guidelines is validated by clinical experience or, indeed, abandoned.

Annette Fenner

Original articles Martínez-Salamanca, J. et al. Prognostic impact of the 2009 UICC/AJCC TNM staging system for renal cell carcinoma with venous extension. Eur. Urol. doi:10.1016/j.eururo.2010.10.001 | Waalkes, S. et al. Is there a need to further subclassify pT2 renal cell cancers as implemented by the revised 7th TNM version? Eur. Urol. doi:10.1016/j.eururo.2010.10.005