Difference between RAT and clear cell papillary renal cell carcinoma/clear renal cell carcinoma

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We would like to thank Dr. Verine for his interest in our paper on renal angiomyoadenomatous tumors (RAT) [1] and for his letter to the editor [2]. Dr. Verine finds it unfortunate that we did not compare clear cell papillary renal cell carcinoma with RAT. In his view, clear cell papillary renal cell carcinoma shares a lot of similarities with RAT, namely CK7, CA-IX, and CD10 immunohistochemical positivity and presence of clear cell snouts as shown in the paper of Tickoo et al. [3].

We have several cases of clear cell papillary renal cell carcinoma in our files and we must state that this type of carcinoma is so much different from RAT that we did not (and do not) consider it worth listing in the differential diagnosis of RAT. Just for mentioning a few major differences between RAT and clear cell papillary renal cell carcinoma: RAT is not a papillary tumor at all and is not composed of clear cells either. When present in RAT, clear cell areas comprise usually only a focal change. Most of the RAT is usually a basophilic tumor growing as a solid lesion, composed of variously

collapsed tubules. Immunohistochemistry does not play any practical role in the diagnosis of RAT as it shares an identical immunohistochemical profile with several entities (it is beyond the scope of this letter to discuss this matter in detail). The immunohistochemistry of RATs was described in our paper [1] only to complete the pathological features of this distinct entity. We further do not see any similarity between the clear snouts of RAT and those illustrated in the paper of Tickoo et al. [3] as suggested by Dr. Verine.

Taking further into account the facts that RAT, in contrast to the cases of Tickoo et al. [3], has a typical angioleiomyomatous stroma, typical capillary vascularity, and lacks the end-stage kidney background, we think that the difference between RAT and clear cell papillary renal cell carcinoma/clear renal cell carcinoma is like that between the day and the night or like that between a rat and a hedgehog.

In closing, we thank again Dr. Verine for his comments.

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