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Letter to the Editor

Reply to Byung Kwan Park's Letter to the Editor re: Mesut Remzi, Michael Marberger. Renal Tumor Biopsies for Evaluation of Small Renal Tumors: Why, in Whom, and How? Eur Urol 2009;55:359–67

Dr. Marberger and I fully agree with Dr. Park that benign tumors are not necessarily small. There is a general view that small renal tumors (SRTs) might be benign and that larger renal masses are renal cell carcinoma (RCC). If benign lesions could be accurately identified before surgery, it could alter the surgical approach to these lesions, as nephron sparing is clearly a goal, especially in benign renal tumors. Previously, we reported that 17.5% of all benign lesions treated surgically in our department were >7 cm. The distribution of benign lesions had the same percentage in tumors of ≤4 cm and >7 cm, although the percentage of RCC increased with tumor size [1]. In the same study, we showed that only 17% of all benign lesions were correctly identified as benign on preoperative computed tomography (CT); most of these were angiomyolipomas (77%) [1]. As the review on renal tumor biopsies (RTBs) focused on SRTs, this was not mentioned in the review article.

Again, we agree with Dr. Park that tumor volume is easy to measure on picture archiving and communicating systems (PACS) workstations; however, tumor volume is not a linear function of diameters measured. A renal tumor of 2 × 2 cm has a volume of 4.3 cm^3, a 2 × 3–cm tumor has a volume of 8 cm^3, and a 3 × 4–cm tumor has a volume of 22.3 cm^3. Even under optimal circumstances, the tumor diameter on a multislice CT scan (collimation: 5 mm; reconstruction: 2.5 mm) varies ±0.3 mm [2]. This, however, is not a big clinical problem for determining the treatment of SRTs. The choice of active surveillance based on tumor diameter/volume or of further intervention during surveillance based on tumor growth only may have a great clinical impact because a small difference in tumor diameter can result in a major difference in tumor volume [3].

It is correct that RTBs do not make sense if they are done as frozen sections. The results of RTBs may take time, as special immunohistochemical staining might be necessary [4]. However, as stated in the review, there are only two small series on the natural history of benign tumors (oncocytomas) [5,6]. Thus, the evidence for changing the policy based on the results of RTBs is not large, and recommendations cannot be drawn from this. It is also known that oncocytomas can harm the patient [7]; thus, most would also treat a benign solid renal tumor. Therefore, if RTBs will not change the treatment policy, they do not have to be performed in advance. Alternatively, it is necessary to have the results of RTBs in the case of minimally invasive treatments for renal tumors to better counsel the follow-up and to interpret the oncologic results.

Conflicts of interest: The author has nothing to disclose.

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