COMMENTARY

Percutaneous renal biopsy may aid management of small renal masses on active surveillance

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All small renal masses (SRMs) are not created equal. Contemporary studies highlight that 20% of SRMs are benign, and of those small kidney tumors that are malignant, 30% are comprised of more indolent histologies (ie. papillary, chromophobe).[1] Therefore, it is imperative to recognize that in reality kidney masses are comprised of a heterogenous group of tumors that may appear similar on cross-sectional imaging but likely have vastly different underlying biologic mechanisms. Delineating these differences is important to appropriately tailor treatment (if necessary) or to guide frequency of follow up for those electing continued active surveillance. In this regard, growth kinetics alone fail to predict malignant potential,[2] and obtaining a histologic diagnosis is essential.

The value of percutaneous biopsy of kidney tumors has continued to generate debate within the urologic community. Concerns regarding non-diagnostic biopsies, biopsy related bleeding, and even the exceedingly rare tract seeding has resulted in a general underutilization of this diagnostic tool. Current studies, however, highlight that percutaneous biopsy provides fairly accurate diagnosis of renal cell carcinoma (including histologic subtype and grade) with an under 1% risk of significant bleeding and exceedingly rare, anecdotal reports of tract seeding.[3-5] Such observations beg for greater utilization.

Using the paradigm of active surveillance for prostate cancer, we have accepted that biopsy (and repeat biopsy) is integral to dictate a patient's follow up algorithm. In other words, a decision for active therapy or continued surveillance is less a function of prostate-specific antigen change alone, but more related to objective biopsy data variables including Gleason sum score, number of positive cores, and percentage of cores involved. It is quite easy to visualize how a similar approach can readily aid management of small kidney tumors and potentially avoid the devastating scenario highlighted in this case by Uhlman et al.[6] □

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