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Clin Lab Med 25 (2005) xi–xii

CLINICS IN
LABORATORY
MEDICINE

Preface

Renal Neoplasms: An Ever-changing Landscape

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Guest Editors

It is fascinating to read the section devoted to the kidney in the 1953 edition of Dr. Lauren Ackerman's textbook *Surgical Pathology*. He lists various rare benign and malignant soft tissue neoplasms—perirenal lipoma, leiomyoma, liposarcoma, leiomyosarcoma, and rhabdomyosarcoma. He includes a gross photograph of "a well-circumscribed mucin-producing adenocarcinoma of the cortex" that may represent the first known example of mucinous tubular and spindle cell carcinoma of the kidney. In the category of renal epithelial neoplasms, he includes adenoma, Wilms' tumor, and adenocarcinoma. He acknowledges that renal adenocarcinoma has "various patterns... granular... clear... papillary"; however, it was his opinion that "it does not appear logical to make subdivisions in nomenclature; better to call it simply an adenocarcinoma of renal tubule origin."

The most recent World Health Organization classification of renal neoplasms includes nearly 50 distinct entities, indicating that subsequent generations of pathologists were not content to abide by Dr. Ackerman's opinion. Some entities were added to the list primarily through observation of morphologic features and correlation with clinical findings; examples of this include sarcomatoid carcinoma, papillary renal cell carcinoma, and oncocytoma. As ancillary diagnostic techniques were perfected and more widely used, it became increasingly possible to detect distinctions between various types of renal neoplasms.

0272-2712/05/$ - see front matter
doi:10.1016/j.cll.2005.03.001 *labmed.theclinics.com*

In this issue of the *Clinics in Laboratory Medicine*, we review the long and complex history of the changes that have occurred in the classification of renal neoplasms. Several articles describe the ancillary techniques that have been so helpful in sorting out various distinct tumors. In addition, we review what is presently known about the most common renal carcinoma—clear cell carcinoma—and provide reviews of entities that have essentially been newly described in the past 10 to 15 years, as well as one entity that is still in the process of being properly characterized—tubulocystic carcinoma. We also provide a concise description of the proper techniques for handling and reporting these neoplasms.

Finally: was it worthwhile to go to all this effort to subclassify renal neoplasms? We believe so. The final article provides a perspective on the influence of the pathologic features of a renal neoplasm on patient outcome. Certain entities—such as oncocytoma, angiomyolipoma, the metanephric neoplasms, mixed epithelial and stromal tumor of the kidney, multilocular cystic renal cell carcinoma, tubulocystic carcinoma, chromophobe renal cell carcinoma, mucinous tubular and spindle cell carcinoma, and cystic partially differentiated nephroblastoma, to name a few—have been recognized as being benign or else carrying an exceptionally good prognosis. Obviously, recognition of benign or indolent biologic behavior in such tumors can be very comforting to affected patients and their families.

We hope that readers enjoy this comprehensive update on the status of renal neoplasms.

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