ADRENAL ADENOMAS M SINGER AND ASSOCIATES

tioning, from metastases. In this series of pathologically proven adrenal lesions, threshold values for size and attenuation correctly classified all metastatic adrenal lesions while still maintaining a relatively high sensitivity. Masses exceeding these thresholds may still be benign and are therefore best evaluated by percutaneous biopsy if long-term stability cannot be documented and metastatic disease in the adrenal gland is of clinical concern.

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Commentary

Nomputed tomographic (CT) scanning was the first noninvasive test with sufficient resolution to locate small adrenocortical tumors with a high degree of diagnostic accuracy. However, its widespread use has created new diagnostic challenges for physicians. Currently, high-resolution abdominal CT scanning reveals incidental adrenal masses in 0.6% of patients. Although most asymptomatic and previously undetected adrenal masses are benign and nonfunctional, several diseases must be ruled out. These disorders include pheochromocytoma, subclinical functional adrenal adenomas, early adrenal carcinoma, and metastases.

In their study, Singer and coworkers assessed the clinical utility of unenhanced CT scanning to differentiate benign adrenocortical adenomas from metastatic adrenal lesions. They evaluated 12 pathologically proven metastatic lesions and 12 adenomas and found that metastatic lesions were significantly larger and had significantly higher attenuation coefficients than benign adenomas. They also performed receiver operating characteristic analysis and found that size and attenuation were equally useful in distinguishing benign from malignant lesions. These findings extend the observations of Lee and coworkers¹ and, if corroborated by larger prospective studies, will provide an alternative to biopsy and magnetic resonance imaging.

However, CT examination alone will not provide complete information for proper management. A complete history, a thorough physical examination, appropriate laboratory and hormonal assessment, and CT evaluation are all needed for conclusive diagnosis and therapy.

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