CT-detected incidental adrenal masses prove to be mostly benign

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The clinical literature notes that incidental lesions of the adrenal gland appear in about 5% of all CT exams performed. Researchers are paying increasing attention to the adrenal gland because it is a common site of metastatic disease. Unfortunately, most of the literature available on characterization of these lesions is outdated and based on autopsies. Lesion size remains the dominant indication for surgical resection.

Most adrenal lesions found incidentally in patients with a low likelihood of cancer could actually be benign and more prevalent than previously thought. They may merit a more conservative approach, according to principal investigator Dr. Julie H. Song, a radiologist at Rhode Island Hospital in Providence.

Song and colleagues retrospectively reviewed data from 973 patients who had no history of malignancy or clinical suspicion of a hormonally active adrenal mass. These patients had 1049 adrenal masses on CT, but the investigators found that none of the patients had malignant disease. They published results in the May issue of the American Journal of Roentgenology. All masses were confirmed as benign either histopathologically or by imaging follow-up or clinical follow-up. Seventy-five percent of lesions were adenomas. The researchers also confirmed 68 myelolipomas (6%), 47 hematomas (4%), and 13 cysts (1%). Three pheochromocytomas (0.3%) and one cortisol-producing adenoma (0.1%) were found incidentally. One hundred twenty-eight lesions (12%) were presumed to be benign by imaging or clinical stability. No malignant adrenal masses were found, even among the 14 patients who later developed malignancy elsewhere. Findings suggest that myelolipomas are more common than previously thought, according to the researchers.

"Our results showed no malignant mass among incidentally found adrenal lesions in low-risk patients without known malignancy," they said.

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