ACR White Paper Targets Thyroid Incidentaloma Reporting

In an article e-published on November 1 ahead of print in the Journal of the American College of Radiology (ACR), members of the ACR’s Incidental Thyroid Findings Committee presented a white paper on “Managing incidental thyroid nodules detected on imaging.” Although the authors were careful to avoid the terms “guidelines” or “standards of care,” the intent of the literature analysis and consensus results was “to provide general guidance for managing incidentally discovered thyroid nodules (ITNs).” Subgroups on the committee looked at data on ITNs identified on CT and MR, nuclear medicine, and ultrasound imaging.

The authors’ objective was to “develop medically appropriate approaches to managing ITNs” detected with these modalities. Anticipated benefits included enhanced confidence in differentiating between ITNs that do and do not require additional ultrasound evaluation, reducing risks and costs associated with unnecessary follow-up procedures, encouraging greater consistency in identifying and reporting ITNs, providing guidance to radiologists (and, by inference, others) who might be concerned about failing to report a later significant ITN for additional investigation, and contributing to a more evidence-based approach to ITN identification and management. After an extensive review of the literature, the committee devised decision-tree flowcharts for ITNs detected on CT or MR, on 18F-FDG PET and other nuclear medicine studies, and on ultrasound performed for extrathyroidal indications. The management recommendations for 18F-FDG PET indicated that for the general population, focal metabolic activity in the thyroid, with or without corresponding evidence on CT, should lead to follow-up with “dedicated thyroid ultrasound and fine-needle aspiration (FNA) of the PET-avid lesion.” However, no further evaluation was recommended for patients with serious comorbidities or limited life expectancies, unless the referring physician or patient specifically requests such follow-up. The committee also recommended that for the general population with ITNs identified by metabolic activity on 99mTc-methoxyisobutylisonitrile and 111In-octreotide scans, dedicated thyroid ultrasound should be performed, with further FNA determined by sonographic criteria. The recommendations for patients with serious comorbidities or limited life expectancy were the same as those for 18F-FDG PET. In general, SNMMI standards of practice and associated commentary have recommended follow-up on all nodules with focal uptake on nuclear medicine imaging.

The committee’s recommendations, particularly those for ITNs detected on CT, MR, and extrathyroidal ultrasound, are not without controversy. For patients younger than 35 years of age with normal life expectancy, the recommendation was for further evaluation with dedicated thyroid ultrasound only if the nodule is ≥1 cm with no suspicious imaging features. In patients 35 years of age and older, the committee recommended additional evaluation with thyroid ultrasound only if the nodule is ≥1.5 cm with no suspicious imaging features. (In both age groups, suspicious imaging findings associated with an ITN should, per current standards, be followed by workup and biopsy.) These recommendations, particularly the cutoff point of 35 years of age, differ from existing guidelines and standards issued by other organizations, both in the United States and Europe. The Revised American Thyroid Association (ATA) Management Guidelines for Patients with Thyroid Nodules and Differentiated Thyroid Cancer (2009; available at www.thyroid.org/thyroid-guidelines/revised/nodules/) recommends that “Diagnostc thyroid ultrasound should be performed in all patients with a suspected thyroid nodule, nodular goiter, or radiographic abnormality; e.g., a nodule found incidentally on CT or MRI or thyroid uptake on 18F-FDG-PET scan.” The ATA also recommends that ultrasound results be used to determine whether or not to proceed to FNA and that nodules not biopsied be followed up in 12–24 months. The ACR recommends no such follow-up for incidentalomas that fall below the size- and age-determined cutoffs.

In an online article published on November 12 in Medscape Medical News, reporter Miriam Tucker spoke with several thyroid experts who provided comments on the new ACR recommendations. David S. Cooper, MD, from the Johns Hopkins University School of Medicine (Baltimore, MD) and first author of the 2009 ATA guidelines, was skeptical that radiologists would embrace standards that encourage much less frequent reporting of incidentalomas. He told Medscape Medical News, “I think that it is inappropriate and paternalistic for a radiologist to observe an incidentally discovered thyroid nodule and then not mention it at all in the impression or even in the body of the report. I realize they think that they may be doing the right thing by decreasing unnecessary testing, but this is not their decision to make.”