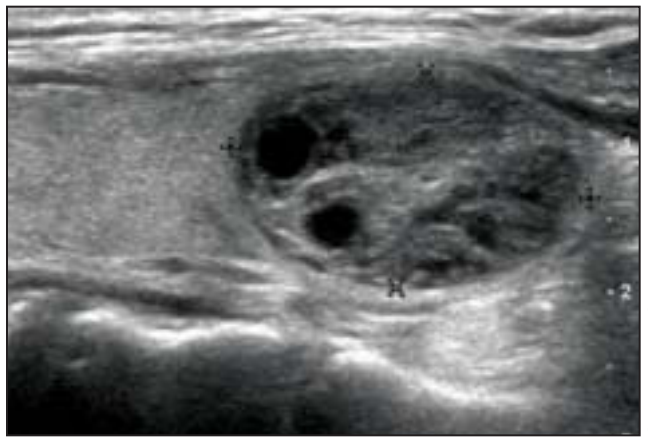

Courtesy Dr. Susan Mandel

Criteria based on the size and appearance of thyroid nodules on ultrasound will limit the use of biopsies. Nodules larger than 2 cm that have a spongiform appearance (right) should be biopsied.

Guidelines Update Approach To Small Thyroid Ca Tumors

BY JOYCE FRIEDEN

Revised thyroid cancer guidelines from the American Thyroid Association call for less use of fine-needle aspiration and of radioiodine, based on evidence that in some circumstances, more treatment did not necessarily yield better outcomes.

Under the new guidelines, "fewer people are going to have a biopsy of their thyroid nodule because we now have ultrasound-based criteria for which nodules should be biopsied, not just based on the size of the nodule but on the way they look on ultrasound," Dr. David Cooper, chair of the ATA task force that revised the guidelines, said in an interview. Biopsy is warranted for

nodules that are greater than 50% cystic and for those larger than 2 cm that have a spongiform appearance. Dr. Cooper discussed the guidelines at the American Thyroid Association meeting in September in Palm Beach, Fla.; they are scheduled to be published in the November issue of Thyroid.

The guidelines also address the use of radioactive iodine (RAI), said Dr. Cooper, professor of medicine at Johns Hopkins University, Baltimore. "We now state that patients who have tumors 1 cm or less should not get RAI. Before, we did not specifically address this situation."

Patients with multifocal micropapillary thyroid cancers are another group that would not get remnant ablation under the new guidelines. "The idea behind remnant ablation after surgery is that rates of recurrence might be lowered," explained Dr. Cooper. "But for very small tumors and microtumors, there is no evidence that the rate of recurrence is less if you give RAI than if you don't. Since there's the potential for harm in RAI, we're saying it's not indicated. That's a big shift also."

For patients who have undergone a total or near-total thyroidectomy for differentiated thyroid cancer, the use of central neck dissection is less definite under the new guidelines. "In the old guidelines [Thyroid 2006;16:109-42], we said patients should be considered for a central neck dissection routinely, because there is a very high rate of metastatic disease," he said. "But it turns out that when you do that, the complications of the surgery are higher. Now we've toned it down a bit and say that central neck dissection should be done in patients with bigger primary tumors but not if they have a smaller tumor."

In terms of long-term management for differentiated thyroid cancer patients, the new guidelines also provide advice for management of patients who have not had radioactive iodine remnant ablation. "In patients who have not undergone remnant ablation who are clinically free of disease and have undetectable suppressed serum thyroglobulin and normal neck ultrasound, the serum TSH may be allowed to rise to the low normal range (0.3 to 2 mU/L)," according to the guidelines.

The timing of PET scans is another issue addressed by the guidelines, Dr. Cooper said. Rather than using PET scans to detect residual cancer only after all other methodologies—including empiric RAI therapy—have not revealed a recurrence, "we're now saying, before you do RAI, you may do a PET scan, especially if the serum thyroglobulin is above 10 ng/mL," he said. The new guidelines recommend that PET scans also may be used as part of initial staging in poorly differentiated thyroid cancers and invasive Hurthle cell carcinomas, as a prognostic tool in patients with metastatic disease to identify those patients at highest risk of rapid disease progression and disease-specific mortality, and as an evaluation of posttreatment response following systemic or local therapy of metastatic or locally invasive disease.

'The main benefit [of the new guidelines] will be in not exposing very-low-risk patients to procedures or therapies that are unlikely to improve outcomes.'

The change in the PET scan recommendation is being made because tumors that are PET-scan positive usually cannot be treated with RAI, "so if it's positive [with PET] it would lead the doctor not to use RAI and think of some alternate form of therapy, perhaps surgery or possibly some sort of chemotherapy."

On the subject of chemotherapy, Dr. Cooper noted that refractory thyroid cancer often does not respond well to standard chemotherapy regimens. "In the old guidelines, we said that when there was nothing else to do, you could use standard chemotherapy; now we're recommending considering the use of newer agents, such as the tyrosine kinase inhibitors sunitinib or sorafenib, or enrolling in a clinical trial. We no longer recommend standard chemotherapy for patients whose cancer is not treatable with radioactive iodine." No tyrosine kinase inhibitor has yet been approved for thyroid cancer treatment.

Dr. Cooper said he hoped the new guidelines "will change practice and benefit patients with thyroid nodules and thyroid cancer. The main benefit will be in not exposing very-low-risk patients to procedures or therapies that are unlikely to improve outcomes, and reserving more aggressive procedures and therapies for patients with more advanced disease."

Dr. Cooper said he had no relevant conflicts of interest to declare. ■