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Reply:

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The American Thyroid Association guidelines for the management of patients with thyroid nodules[1] outlines the role of sonography and fine-needle aspiration for the evaluation of thyroid nodules. Our work and the work of others[2-4] suggest that fluorodeoxyglucose–positron-emission tomography (FDG-PET) positivity is associated with a significant risk of malignancy, not unlike the cytologic reading of "indeterminate cytology," which, according to the task force (R9, recommendation B), states that a "lobectomy or total thyroidectomy should be considered."[1] We support the work of the American Thyroid Association and believe that FDG-PET positivity simply represents an adjunct to sonography and cytology for the risk assessment of a patient with a thyroid nodule. We do not advocate thyroidectomy for patients with benign cytology and retract any implication of such; however, we do inform patients of the data on FDG-PET positivity—after all, the false-negative rate for fine-needle aspiration of thyroid nodules is higher than the false-positive rate. The American Thyroid Association recommends that a lobectomy or total thyroidectomy be considered for indeterminate cytology, which is associated with a 5%–10% risk of malignancy. Do we feel comfortable withholding surgical intervention when FDG-PET positivity is associated with a 25%–50% risk of malignancy?

References

1. Cooper DS, Doherty GM, Haugen BR, et al. **Management guidelines for patients with thyroid nodules and differentiated thyroid cancer.** *Thyroid* 2006;16:109–42
2. Choi JY, Lee KS, Kim HJ, et al. **Focal thyroid lesions incidentally identified by integrated 18F-FDG PET/CT: clinical significance and improved characterization.** *J Nucl Med* 2006;47:609–15
3. Kang KW, Kim SK, Kang HS, et al. **Prevalence and risk of cancer of focal thyroid incidentaloma identified by 18F-fluorodeoxyglucose positron emission tomography for metastasis evaluation and cancer screening in healthy subjects.** *J Clin Endocrinol Metab* 2003;88:4100–04
4. Chen YK, Ding HJ, Chen KT, et al. **Prevalence and risk of cancer of focal thyroid incidentaloma identified by 18F-fluorodeoxyglucose positron emission tomography for cancer screening in healthy subjects.** *Anticancer Res* 2005;25:1421–6

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