

Is Long-Term Follow-up Necessary for Benign Thyroid Nodules?

ANALYSIS AND COMMENTARY ● ● ● ● ●

This interesting study considers the problem of how frequently and how long to follow thyroid nodules that are benign. Although the ATA guideline that is described in the introduction is open-ended, it does not specify the absolute length of follow-up, but it does state that longer follow-up of nodules thought to be stable at earlier intervals should be carried out, perhaps at intervals of 3 to 5 years.

The current study has serious flaws. First it is retrospective. Second, perhaps because MD Anderson Cancer Center is a referral center, 43% (280 of 646) of patients did not undergo follow-up there, and no follow-up data are provided on these patients. The authors point out that there were no clear clinical differences in the remaining patients who underwent either short-term or long-term follow-up. On that basis, their conclusions may be considered valid. Of course, what is needed is a prospective study with nearly 100% follow-up to determine whether there is a significant yield of new findings suggestive of

malignancy in patients who are followed for longer than 3 years.

Continued growth of cytologically benign nodules may be worrisome and justify another FNA. Another concern is false negative FNA results. In the case of small nodules, it is possible that the sampling included mainly the benign tissue surrounding the nodule. In the case of larger nodules, the possibility of heterogeneity has been raised as a basis for false negative cytology, but a recent study from the Walter Reed National Military Medical Center showed that false negative cytology was not more common in nodules larger than 4 cm as compared with smaller nodules (2). Nevertheless, the rate of false negatives in that series was 7%.

For the above reasons, it seems reasonable to follow patients with benign thyroid nodules by ultrasound for 3 years and at much longer intervals after that. Additional studies will be needed to justify stopping follow-up at 3 years when there is no growth of the nodule in order to reduce costs of follow-up.

References

1. Cooper DS, Doherty GM, Haugen BR, et al. Revised American Thyroid Association management guidelines for patients with thyroid nodules and differentiated thyroid cancer. *Thyroid* 2009;19:1167-1214.
2. Shrestha M, Crothers BA, Burch HB. The impact of thyroid nodule size on the risk of malignancy and accuracy of fine-needle aspiration: a 10-year study from a single institution. *Thyroid* 2012;22:1251-6. Epub October 19, 2012.