

A Benign Gene Expression Classifier Result on an Indeterminate Thyroid FNA May Reduce the Need for Thyroidectomy

ANALYSIS AND COMMENTARY ● ● ● ● ●

This study has a number of significant shortcomings. It did not subdivide the nodules in the indeterminate category. The number whose cytology was either FLUS or follicular neoplasm was not stated. Apparently, only 2 were suspicious; another Afirma study has not recommended the use of the gene classifier for nodules that are suspicious for malignancy for two reasons; first, almost two-thirds of these nodules turn out to be cancers, and second, the classifier mistakenly classified 6% of a small group of suspicious nodules as benign when they were really malignant (3).

It would be interesting to know the number of patients whose cytology was in the indeterminate category and whose AGECE was classified as suspicious, but

this was not stated; only those classified by AGECE as benign were the subject of the study.

The study does not state the number of malignant nodules found in the 28 patients who actually had thyroidectomy. The justification that the study focused only on how many patients were spared thyroidectomy is not a sufficient reason for this omission.

At the recent ATA meeting in Quebec, McIver and colleagues from the Mayo Clinic presented their additional experience with the AGECE. They reported that only 23% of indeterminate nodules were classified by AGECE as benign. Of the 27 AGECE “suspicious” nodules that went to surgery, only 4 (15%) were malignant (4).

— Jerome M. Hershman, MD

References

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