

Does the Risk of Malignancy Increase When a Thyroid Nodule Is Larger Than 2 cm?

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ANALYSIS AND COMMENTARY ● ● ● ● ●

This large body of data has been analyzed very carefully and provides more concern for malignancy when the nodule is larger than 2 cm. In addition, the data suggest that larger solid nodules are more likely to be follicular carcinoma as compared with the smaller nodules. However, the literature concerning the size of nodules and the risk of malignancy is controversial. McHenry et al. evaluated 1023 patients with nodules; 673 underwent surgery (3). The mean (\pm SD) size of the benign nodules was larger, 4.4 ± 2.4 cm as compared with 3.3 ± 2.2 cm for malignant nodules ($P < 0.05$). In an estimate of probability of malignancy based on size, their analysis showed that the likeli-

hood of malignancy significantly decreased nonlinearly with increasing nodule size. The recent paper by Shrestha et al. (reviewed in the November 2012 issue of *Clinical Thyroidology*) found malignancy in 19.3% of 533 nodules 1.0 to 3.9 cm and 14.3% of 127 nodules ≥ 4 cm (4).

Another reason for concern in evaluating FNA results in large nodules is the possibility of a false negative result due to sampling error. The current study of Kamran et al found that the false negative rate was 1.3% in larger nodules and only slightly less in smaller nodules. Shrestha et al. also reported that false negative rates did not differ significantly based on nodule size (4).

References

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