Indeterminate Thyroid Nodule: Mystery Continues Despite Recent Advances

Sir,

We read with great interest the article "A pragmatic approach to an indeterminate thyroid nodule." It was interesting to go through the meticulous thought process for decision-making in an indeterminate nodule, and the approach designed will definitely help in clinical practice. Equally realistic is the author's admission that cost of molecular studies in fine-needle aspiration cytology (FNAC) sample may be equal to the cost of surgery itself in our Indian setting.[1]

The article mentions about thyroid imaging reporting and data system scoring system (TIRADS) system based on ultrasound (US) characteristics of thyroid nodules. US findings can be further refined by use of color Doppler. US elastography is also becoming more accessible and is finding utility in decision-making in indeterminate nodules. TIRADS does not include Doppler or elastography findings. Thyroid multimodal-imaging comprehensive risk stratification scoring of the risk stratification systems is a risk stratification system incorporating TIRADS, color Doppler, and elastography findings. This risk stratification system had sensitivity of 96% and specificity of 95% for predicting malignancy when correlated with the final pathological diagnosis.[2,3]

We would also like to highlight one of the limitations of US and FNAC which is conferred by the size of the nodule. Wharry *et al*.[4] documented 10.4% prevalence of malignancy in thyroid nodules more than 4 cm in size which were reported benign by FNAC as well as had no suspicious features by the US. Studies for molecular markers in this particular group of nodules are sparse. This calls for a more cautious approach in nodules more than 4 cm.

We would also like to bring to notice that though routine measurement of serum calcitonin levels is not advocated in nodular thyroid disease, a recently published study by Turk *et al*.[5] observed dAetection rate of 0.62% for medullary thyroid carcinoma (MTC) in nodular thyroid disease. The benefits from this clinical practice are that the surgeon is alerted to the need to perform total thyroidectomy and central compartment lymphadenectomy, which is the minimal surgical treatment for MTC. It may also improve outcomes in MTC due to early diagnosis.

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Conflicts of interest

There are no conflicts of interest.

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