

## 'THE USE OF THYROID ULTRASOUND BY NON-RADIOLOGISTS FOR THE ASSESSMENT OF THYROID NODULES'

Editor,

### INTRODUCTION

In the UK and Ireland, the use of thyroid ultrasound (US) for the assessment of thyroid dysfunction, thyroid nodules and follow up of thyroid cancers is typically performed by a radiologist or a trained sonographer. The majority of thyroid nodules will be benign, however significant resources can be utilized in the investigation of thyroid nodules, often with unnecessary surgical treatment, this has implications for cost. In 2014, the BTA (British Thyroid Association) introduced the ultrasound 'U' classification to rationalize the use of thyroid ultrasound in the assessment of thyroid nodules. They suggested standards for reporting, and indications for FNA (fine needle aspiration) based on a US scoring system U1-5, as well as appropriate follow up based on these US findings<sup>1</sup>. More recently in some centres, trained endocrinologists are increasingly performing routine diagnostic ultrasonography in the management of thyroid disease, often in the context of 'one stop' thyroid nodules clinics.

### ACCREDITATION

In the UK, obtaining accreditation for endocrinologists is through the BTA and the RCR (Royal College of Radiologists), through participation in a curriculum for training in neck ultrasound. Support is also provided from the Society for Endocrinology and approved by the Royal College of Physicians. The training program is recommended for specialty registrars and endocrinologists who manage thyroid disease and thyroid cancer. Participants complete a mandatory one day course in London (fees: £300 for consultants, £250 for trainees/registrar), which comprises of lectures on the theory, principles and practice of ultrasound with a practical 'hands on' workshops on how to perform thyroid ultrasound and FNA. For Level 1 certification, applicants should complete a log of 50 scans and a minimum of 200 cases with supervision from a consultant radiologist competent in thyroid US. For level 2 certification at least one scanning session per week is required, with an additional 120-200 cases over a further 6 months. A level 3 practitioner can mentor and supervise level 1 and 2, conduct research and teach thyroid ultrasound at all levels.

### POSITIVES AND NEGATIVES

Purchasing an ultrasound machine can be expensive and demonstration of cost effectiveness is often required to

confirm overall value. The process of obtaining certification can be time consuming and would only be recommended if there is a reasonable volume of thyroid cases reviewed on a yearly basis. Finding a supervising radiologist to assist with certification is another consideration, as is the perceived 'removal of business' from radiology colleagues. The use of thyroid ultrasound is relatively inexpensive, non-invasive and accurate in describing thyroid morphology and is a useful adjunct to the clinical exam<sup>2</sup>. In addition, its use by endocrinologists can expedite diagnoses and ease the burden of imaging on radiology colleagues.

### SUMMARY

Obtaining certification in the use of thyroid ultrasound can be timely and expensive for endocrinologists. There is a clear pathway in the UK as to how this can be achieved. Once established, thyroid ultrasound embedded within a thyroid clinic has the potential to improve and streamline the investigation and management of thyroid nodules.

**Key words:** endocrinologists, thyroid ultrasound, accreditation, thyroid nodules

### The authors have no conflict of interest

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### REFERENCES

1. Perros P, Boelaert K, Colley S, Evans C, Evans RM, Gerrard Ba G, et al. Guidelines for the management of thyroid cancer. *Clin Endocrinol (Oxf)*. 2014;**81**(Suppl 1):1-122.
2. Tan GH, Gharib H. Thyroid incidentalomas: management approaches to non-palpable nodules discovered incidentally on thyroid imaging. *Ann Intern Med*. 1997; **126**(3): 226-31.

### ERRATUM:

The editor has been informed that there is an error in the following paper:

Outcome of primary rhegmatogenous retinal detachment surgery in a tertiary referral centre in Northern Ireland — A regional study. *Ulster Med J* 2017;**86**(1):15-19.

The third author's name should be corrected to Giuseppe Casalino

We apologise for any inconvenience caused.



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