

## Lingual thyroid imaging with $^{123}\text{I}$ SPECT/CT

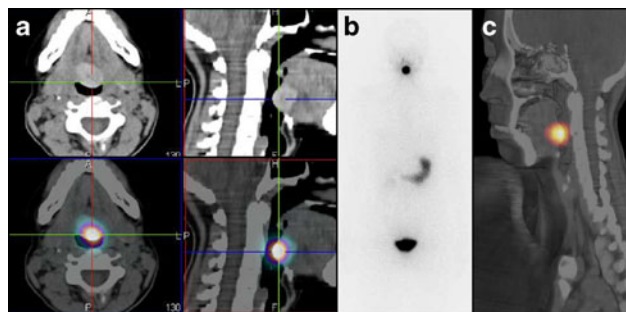
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A 30-year-old woman treated for biological hypothyroidism with L-thyroxine ( $\text{LT}_4$ ) presented with a suspicion of lingual thyroid when head and neck examination discovered a lump on the tongue, confirmed by cervical ultrasound (US) findings. The scintigraphic study performed under  $\text{LT}_4$  ( $87.5 \mu\text{g}/\text{day}$ ), after injections of recombinant human thyroid-stimulating hormone (TSH), and 2 h after injection of 37 MBq of  $^{123}\text{I}$ , on a single photon emission computed tomography (SPECT)/CT gamma camera (Siemens Symbia T2) showed an isolated high cervical uptake corresponding to the sublingual thyroid [1]. SPECT/CT images provided anatomical details: larger diameter of 22 mm and no functional glandular tissue in central cervical position (a). Whole-body scan did not show any pathological iodine uptake, especially in the pelvic area (b). This acquisition allowed the realization of 3-D reconstructions (c).

Hypothyroidism represents the main clinical symptom of ectopic thyroid [2]. Other complications are haemorrhage and superior airway obstruction with dyspnoea and/or dysphagia.

The diagnosis of lingual thyroid relies on clinical examination and cervical US that identifies a vacant thyroid site and a lump on the tongue base with a structure similar to thyroid tissue [3].  $^{123}\text{I}$  scintigraphy with a hybrid camera provides functional and anatomical images, and looks for other locations of ectopic thyroid tissue.



**Conflicts of interest** None.

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### References

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