

**Failure to appropriately scan and assess thyroid gland
(14HDC00558, 28 June 2016)**

Radiologist ~ Sonographer ~ Thyroid ~ Lymph nodes ~ Cancer ~ Ultrasound ~ Right 4(1)

A woman presented to her general practitioner (GP) having noticed a lump at the front of the base of her neck on the right-hand side. Blood tests were normal. The GP referred the woman for an ultrasound of the right thyroid gland which was performed the same day at a radiology service by a sonographer.

The local lymph nodes adjacent to the thyroid gland were not scanned by the sonographer. No comments were recorded by the sonographer in the designated sonographer worksheet space headed “lymph nodes”. The sonographer did not discuss the ultrasound with the reporting radiologist.

The radiologist reviewed the ultrasound images together with the referral form and sonographer worksheet. The radiologist reported the right thyroid to be slightly bulkier than the left, the presence of nodules, and a finding suggestive of a multinodular goitre. No biopsy/fine needle aspiration (FNA) was recommended.

Over the next two years, the woman attended a number of primary care consultations, some of which related to her concerns about the lump in her neck. No apparent changes were noted by doctors during this time. However, owing to her own ongoing concerns, the woman requested a referral to a consultant.

Investigations performed by the consultant demonstrated that the nodule of the right lobe of the thyroid, as well as a smaller one on the left lobe, were very slightly larger than when studied originally. The consultant referred the woman for an ultrasound and FNA of the right and left thyroid nodules.

The FNA biopsies of both areas confirmed papillary thyroid carcinoma in both masses. A CT scan confirmed the presence of the carcinoma in the thyroid nodule, as well as a right-sided cervical lymphadenopathy. The woman was referred to a head and neck surgeon, and subsequently required extensive surgery and radiotherapy.

It was held that the radiologist failed to query the absence of imaging of the local lymph nodes, to ensure that he had all the relevant information to make his assessment. Furthermore, he failed to interpret the scan as showing suspicious findings and to recommend FNA. Accordingly, the radiologist did not provide services to the woman with reasonable care and skill and, breached Right 4(1).

The sonographer did not follow accepted professional practice and scan the lymph nodes adjacent to the thyroid gland. The sonographer failed to provide services to the woman with reasonable care and skill and breached Right 4(1).

The radiology service’s protocol did not explicitly refer to the need to assess and/or scan lymph nodes adjacent to the thyroid. Accordingly, the radiology service was aware of the sonographer’s practice to adequately fulfil the minimum requirements of an examination, but did not take action to ensure that he extended his examinations, in

order to be consistent with accepted practice. The radiology service failed to provide services to the woman with reasonable care and skill and breached Right 4(1).

The Commissioner recommended that:

- the Medical Radiation Technologists Board consider taking steps to ensure that all New Zealand sonographers adopt a consistent approach to ultrasound scanning of the thyroid;
- the Ministry of Health consider the wording of the national guidelines for primary care, surrounding indications for FNA in a patient presenting with a neck lump;
- the sub-regional clinical leadership group consider the clarity of local DHB guidelines surrounding indications for FNA in a patient presenting with a neck lump; and
- the radiology service audit compliance with the changes it has made to its ultrasound protocols to include a requirement for sonographers to assess and/or scan adjacent lymph nodes when scanning the thyroid gland.

Recommendations were also made with regard to the radiologist and the sonographer, including that they each arrange independent quality reviews of a random selection of thyroid ultrasound scans and reports they have completed over the last 12 months