

Hypothyroidism presenting as a hot pertechnetate nodule

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The authors report an uncommon finding of hot nodule on Tc-99m sodium pertechnetate thyroid scan in three patients with hypothyroidism. Data indicate that hypothyroidism is secondary to Hashimoto's disease (HD). There was a concordant aspect on I-131 scan in two; a nodular discrepancy (cold nodule with I-131) was associated with the highest microsomal antibodies titer. The findings of thyroid scan and ultrasonographic findings indicate that hot nodules may be observed either on initial or advanced stages of HD. Color flow Doppler sonography, showed an absence of internal increase of vascularization. These data suggest that the observed hot nodules correspond to localized hyperplasia of the less diseased portions secondary to chronic stimulation by TSH.

Key words: radionuclide imaging, thyroiditis, autoimmune, hypothyroidism, nodule