

False Positive Biopsy on a patient with Chronic Lymphocytic Thyroiditis

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Case Report

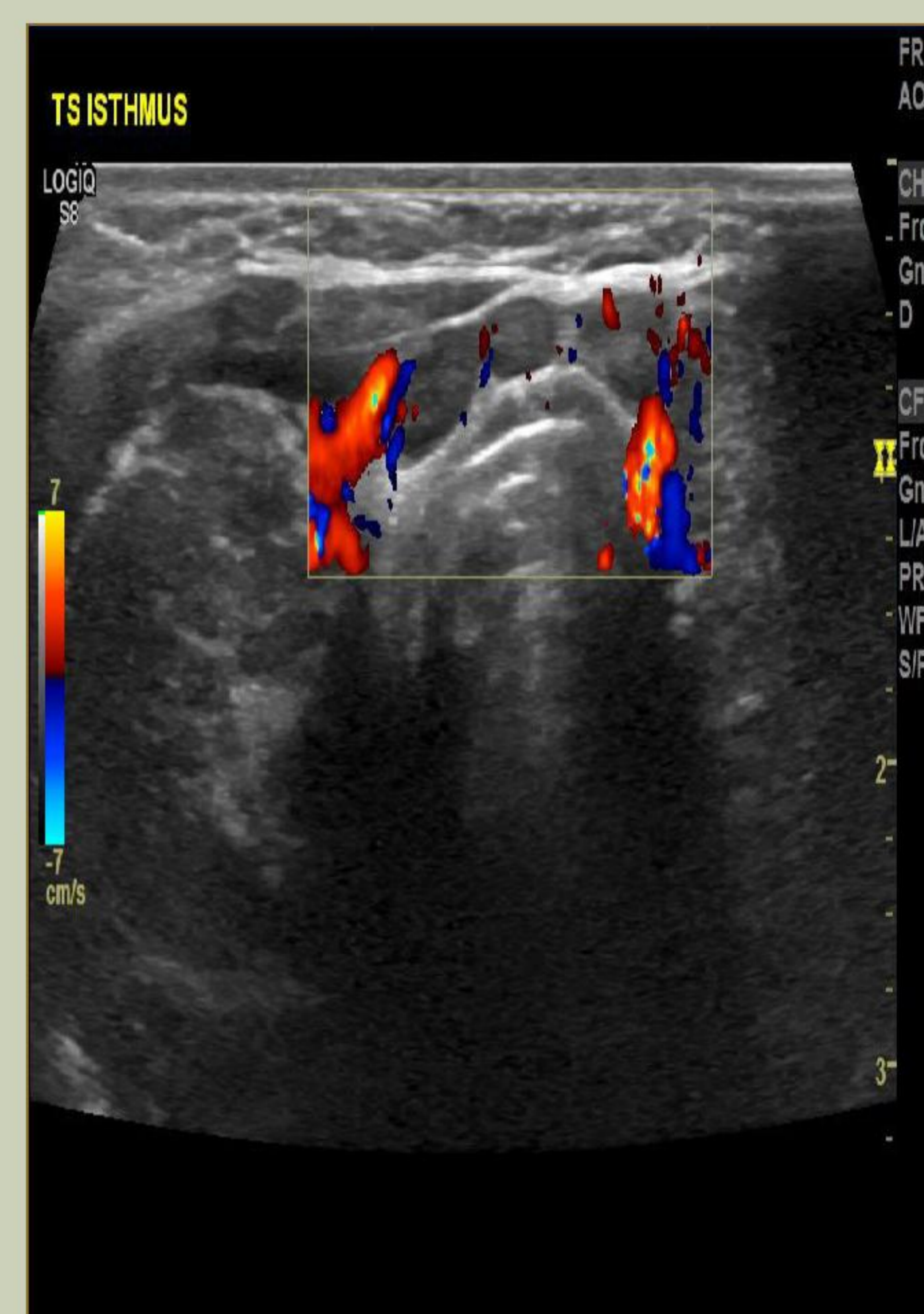
A 40 year old lady who was four months postpartum, presented with clinical and biochemical features consistent with post partum thyroiditis associated with neck swelling. She had a family history of autoimmune thyroid disease. She underwent ultrasound guided fine needle aspiration (FNA) biopsy which was reported as Thy3f and listed for diagnostic hemithyroidectomy. She presented to us for a second opinion. She was on thyroxine replacement therapy and the anterior neck swelling has resolved. Thyroid antibodies were negative. Thyroid ultrasound was repeated showing a diffusely lobular thyroid consistent with background thyroiditis with associated lymphadenopathy. The isthmus 'thyroid nodule' that was previously biopsied was noted to be an extra-thyroidal isthmus lymph nodes in close proximity to the thyroid. Patient was discussed in a multidisciplinary meeting (MDT) and confirmed that the original cytology was reflective of lymphocytic thyroiditis. She was advised that surgery was not indicated but she will be actively monitored clinically.

Discussion

Sonographic features of chronic lymphocytic thyroiditis (CLT) include the following: hypoechoic and heterogeneous, pseudomicronodular ('swiss cheese' or 'honeycomb' pattern), pseudomacro nodular, profoundly hypoechoic, developing fibrosis, hyperechoic and speckled. Pseudomicro nodular appearances may be confused with a multi-nodular goitre. With the pseudomacro nodular pattern the area of inflammation is larger. The skilled sonographer need to be able to appreciate both these patterns as they may be misinterpreted for thyroid nodules. Reactive lymph nodes are almost universally found in CLT; they are commonly found in the pretracheal and paratracheal region as well as at levels III and IV. Given the higher prevalence of papillary thyroid cancer in CLT, such lymph nodes need to be distinguished from malignant lymph nodes using the same sonographic criteria as per patients without CLT.

Conclusion

- ✓ Isthmus lymph nodes can be mistaken for thyroid nodules given their close proximity to the thyroid potentially leading to unnecessary investigations and treatment
 - Whenever uncertainty exists one approach is to radiologically follow the lesion in question
- ✓ When thyroid FNA samples are sent for cytology it is prudent to write on the request form of whether there is underlying thyroiditis as it is not uncommon for thyroid nodules to be misdiagnosed as Thy 3a & 3f (Bethesda classification stage 3 & 4) in the presence of thyroiditis



References

Serres-Creixams X, et al. Paratracheal lymph nodes: a new sonographic finding in autoimmune thyroiditis. *J Clin Ultrasound*. 2008; 36: 418-21
British Thyroid Association, Guidelines for Management of Thyroid Cancer; February 2014

