

Intrathyroidal Thymus: An Incidental Diagnosis

André Coelho Almeida*, Susana Cláudia Teixeira, Juan Calviño Cabezas

Department of Pediatrics and Neonatology, Centro Hospitalar de Trás-Os-Montes e Alto Douro, Portugal

ABOUT THE STUDY

A 4 year-old girl, presented to the pediatric department with a history of upper respiratory tract infections and cervical adenopathies since she was 3 years old. Physical examination was unremarkable, except for a 2 cm left cervical adenopathy (level II), without adherence to the deep planes, with well-defined edges. Analytic evaluation was normal (including thyroid hormones).

Ultrasound was detected a 5 mm hypoechogenic lesion, in the left lobe of the thyroid gland (Figure 1), with a similar structure to the thymus and cervical adenopathies with reactive characteristics. These adenopathies disappeared after 4 weeks without treatment. No additional study has been performed.

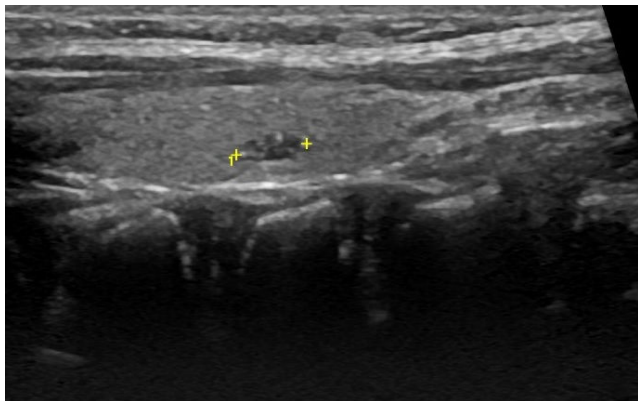


Figure 1: Ultrasonography of the thyroid left lobe, longitudinal, shows a 5 mm hypoechogenic fusiform lesion with well-defined contours.

Widespread use of complementary diagnostic tests, such as ultrasound, which itself is not invasive, leads to the accidental

diagnosis of some anatomical and pathological changes, like the presence of an ectopic thymus [1]. Thymus is a lymphoid organ developed by the inferior migration and consequent merger of the third and fourth pharyngeal pouches (around the 9th week of gestation), which then installs itself in the anterior mediastinum [1-3]. In this migration, interruption errors can occur and pieces of thymic tissue may remain along the descending path (including thyroid gland). Symptoms of this are rarely shown and most patients are euthyroid [1-3].

Although the intrathyroid thymus can be mistaken for a malignant nodule, the diagnosis can be safely performed if one takes into account its ultrasound characteristics [1]. The echogenicity is similar that of the normal thymus [1-3]. It is generally hypovascular or isovascular, with well-defined contours and hypoechoic, but may also be hyperechoic [1-3]. The fusiform shape is characteristic in longitudinal sonograms [1-3]. In fact, given that it may disappear with growth due to the increase in sex hormones with adolescence, ultrasound diagnosis in most cases can avoid unnecessary studies [1].

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Correspondence to: André Coelho Almeida, Department of Pediatrics and Neonatology, Centro Hospitalar de Trás-Os-Montes e Alto Douro, Portugal, E-mail: andrec_almeida@hotmail.com, Phone: +351 967184191

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