Ectopic Thyroid Tissue: Imagery Findings versus Pathological Report

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Introduction

Accessory thyroid tissue is a part of thyroid dysgenesis and sometime represents an incidental adult finding displaying a normal function.

Material & Methods

This is a case presentation of an adult admitted for an atypical anterior cervical aspect which could not be recognized as accessory thyroid tissue only after surgery. Thyroid evaluation used imagery like ultrasound, computed tomography (CT), assays as TSH (Thyroid Stimulating Hormone), calcitonin, TPO antibodies (anti-thyreoperoxidase).

Results

A 62-year male is diagnosed with prostate cancer at age of 58 and treated with radiotherapy and hormone blocking therapy with consecutive normalization of specific prostate antigen. His father was diagnosed and treated for bone cancer. While evaluation for his previous oncologic condition.

CT scan with contrast revealed asymmetrical thyroid with a mass of unknown origin at the cervical lateral level, left to the esophagus, of oval shape with regular margins. The 2 centimeter – sized mass causes a small deviation of the esophagus, and it has a hypo-dense spontaneous structure.

Thyroid function was normal (TSH of 0.9µUI/mL, N:0.5-4.5µUI/mL), negative TPO and normal calcitonin and parathormone of 24.48pg/mL (N:15-65pg/mL). A paraganglioma was suspected based on high circulating serotonin of 423ng/mL (N:40-400ng/ml) but otherwise normal profile 24-h urinary metanephrines of 72µg (N:50-450µg/24-h), and normetanephrines of 274µg (N:100-600µg/24-h), plasma metanephrines of 29.6µg/mL (N:10-90pg/mL), plasma normetanephrines of 82.2µg/mL (N:15-180pg/mL), chromogranin A of 102ng/mL (N:20-125), neuron specific enolase of 9.13ng/mL (N:0-12ng/mL).

The surgical removal was performed and thyroid tissue of adenomatous type was found. No malignancy, neither surrounding tissues were presented so a late diagnosis of thyroid dysgenesis was established.

Conclusion

Accessory thyroid tissue might not be highly suggestive at CT or ultrasound especially if the late diagnosis is done during adult years. The presence of a prior malignancy may require several imagery tests and consecutive discovery of the thyroid digenesis.